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CONDITION OF THE RYOTS

OF PART OF

CHANDITALA THANNA, IN HOOGHLY DISTRICT,

AND A

DESCRIPTION OF THE VARIOUS CROPS

AND METHODS OF CULTIVATION IN USE AMONG THEM.

BEING PART II OF A REPORT ON RATES

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CONDITION OF THE RYOTS IN PART OF HOOGHLY DISTRICT AND METHODS OF CULTIVATION IN USE AMONG THEM.

INTRODUCTION.

Account of crops.

NOTHING so fully illustrates the condition of the ryots as a description of the various crops and methods of cultivation in use among them. I have, therefore, at the risk of giving information which is already known, attempted to give an account of the chief crops, with the outturn and the cost of cultivation of each.

Information to be received with caution.

2. The account is necessarily imperfect, as the subject is one on which the accumulated experience of many years is wanted before any safe conclusions for action can be arrived at. The conclusions here offered, then, can be safely used for the purpose of statistics only, and not as the groundwork for determining proper rates. As statistics, and as pointing out facts which may afterwards form a subject for systematic enquiry, I offer them. It will be apparent from the accounts themselves that they are nothing better than averages, and an average, though useful for giving an idea of the truth, is most pernicious if any attempt be made to apply it to any particular case. It may be said of averages that they are true of all collectively and of none in particular.

Averages dangerous

Special enquiry for each village separating absolutely necessary.

3. I have recommended, that the establishment of a table of rates for any village should be preceded by a special enquiry *for that village*, and never for a larger area at a time. I believe it would be generally possible to have a table of rates, simple enough to be useful for all the lands in a single village falling within one rate area. The number of areas in which village lands would fall in the tract under report would never exceed three and rarely two. If it is objected that the area if

too small for one enquiry, I cannot help it. Then the enquiry is impracticable. In no case can it be safely made for a larger area than the lands of one village. Of that I am thoroughly well satisfied. I do not agree with those who say (as some proprietors in this tract have said) that a table of rates cannot be framed at all I believe it can. I shall conclude my report with specimen tables of rates for one or two village areas, but shall do so only on the distinct understanding that they are for information merely, and a regular enquiry by a properly empowered officer, under proper conditions (those laid down in my proposals appear to me essential) would in every case be necessary before any table should be framed as authoritative.

Condition of ryots.

4. The account of crops is followed by an account of the condition and expenses of the ryots, besides the bare cultivation of the ground. This will finish the second part of my report.

Accounts of cultivation and outturn how got.

5. The accounts of crops are accompanied by tables showing the various estimated costs of cultivation and values of outturn, from which it will appear how far the general accounts are borne out by the special accounts. These accounts were invariably gathered in the villages, in presence of the head ryots, the zemindars, or talukdars' amla, and sometimes the zemindar or talukdar himself. Some ryot who was specially engaged in the crop was chosen to give the accounts, subject to check on any mistakes. I will here observe that I have meddled as little as possible with the figures even where I considered them incorrect. I do not claim sufficient knowledge of the subject to give an infallibly correct account of everything, and believe the Board would prefer the original figures, errors and all, as more likely to be instructive than any cooked account by myself. I have endeavoured to explain discrepancies, or show where I thought there had been mistakes

Staples.

6. I call special attention to the paddy crop for the low land and to jute and kalai for the high lands, as I intend to propose that these shall be the staple crops. In Makla and the neighbouring villages, however, sugarcane will probably be the better staple for the upper lands.

Difficulties, not grievances, described.

7. Perhaps it is hardly necessary to explain that I do not intend by depicting the small circumstances of the ryots to insinuate that any one is to blame for these

circumstances. This is a difficulty—perhaps the chief difficulty of all—which besets both Government and zemindars in dealing with the ryots. I call attention to it specially as, whether my proposed solution of it be approved or not, it will be the principal difficulty to be overcome in making a suitable settlement of the rent question. I submit that in cases such as that of Makla (which, though happily not very common, do exist) there is complete evidence that there is something defective in the provisions or procedure of the law or in both. The third part of my report will contain such information as I can present as to the relation of zemindars and ryots, and between ryots and their sub-ryots.

ACCOUNT OF PADDY CULTIVATION.

Section I.—Classes of land.
Section II.—Processes of cultivation.
Section III.—Labour required for each process.
Section IV.—Cost of labour.
Section V.—Outturn.

Section I.—*Classes of land.*

General description of sali land.

Sali land, on which haimontik or winter rice is cultivated may be defined as land which goes under water in the rains. No regular crop can be grown on such land except haimontik rice.

2. This land consists of all low land below flood level, except such as from excessive water cannot be cultivated in any way.

Methods of classification.

3. Sali land for classification may be divided in two ways One way is with respect to qualities of soil; the other with respect to the water.

Quality of soil.

4. First, as respects fertility of soil, any ryot when asked why one piece of land is more productive than another will say that it is "tez" or sharp—well flavoured. In a village "mat" the land naturally best is generally at the bottom, for it receives all the refuse washed off the upper land, and is the richest. Possibly a little land close to the village also acquires a better quality from the numerous sanitary deposits. Soil of the same village is generally of much the same nature. The village generally forms one of a group whose soil is also much of the same quality and nature. The rice fields, especially when they form part of a great plain or valley, are practically of the same quality, this always being borne in mind that the lowest land and that close to the villages are likely to be the best.

In classification it is necessary to begin by taking each village by itself, and grouping the villages according to quality of soil as ascertained by local enquiry, and from the general physical features of the neighbourhood.

Classification by level.

5. Classification by water will be village by village. To have perfect paddy land from this point of view, it is necessary to have land from which the water does not dry prematurely, and on which it does not stay too long, that is, the water lies on the land until the grain is filled out and ripe for the

harvest, and then dries up so that the crop can be reaped dry. In any one village the question of classification resolves itself into one of water. The question of quality of land is of comparatively little importance.

Position of classes.

6. The paddy lands of a village are generally (except in cases of great hardship) all cultivated. They are divided generally into classes, which vary from one to five in number. One of the chief causes of classification, not merely as it affects the actual outturn, but as it affects labour and other matters, is water. The lands are almost always in the form of a saucer or of a valley, according as they do not or do form part of a larger area comprising the land of other villages. In some villages no part gets enough of water; in some no part gets little enough. In most, however, there is land which gets too much, and other land which gets too little, and other which generally gets the right quantity.

Where the best land lies.

7. Wherever this last is, it is called the best land of the village, or awal. It will form either a plot, the deepest part of the fields, or a zone round it on a certain level. Where it is at the bottom of the basin, this is as nearly perfect rice land as can be got in the neighbourhood, the land being the richest in the basin, and the supply of water being just right. Where it is not at the bottom, the zone is flanked on either side by a zone of doim, one so-called because it usually gets too little water, and another because it gets too much. In a year of excessive rain, the upper doim will be as good as the awal; in a year of excessive drought, the lower doim; while in an average year the awal will be decidedly better than either. Above and below these (perhaps, however, only above or only below, or perhaps not at all) will be zones of soyam and chaharam. In a village showing all varieties there would thus be seven different zones, with a plot of uncultivated bil in the middle. Any village fields may be represented by cutting off some or all of those above, or some or all of those below, or some of both, and by varying the width of the zones.

8. It comes to this, that the question in the lands of any one village is one of level. The level of awal land is first to be ascertained, and the rest can be allotted with some degree of confidence.

Paddy summary.

9. To sum up the section. Land can be classified generally according to qualities of soil and physical aspects, and particularly according to water level. The proper

area to take as a rate unit would be ascertained by the former method, and the proper classes within that area would be ascertained by the latter. This would not be absolutely certain, but would form a good foundation. The relation of water to the land might, of course, have been brought about by natural or by artificial means.

SECTION II.—*Processes of Cultivation.*

Cost of production: general average cannot be given.

The cultivation of haimontik paddy is affected very much by the water; the rainfall varies from year to year, and the water is deep at one place while another place is dry No general number can therefore be given as the number of days' labour necessary to cultivate a given area. It is yet very important to know about how many days' labour are necessary to complete the production, and for this purpose a slight sketch is here given of the processes gone through.

Manure.

2. In the first place, though the course usually followed is to trust to the natural qualities of the soil, it is the custom in certain tracts to improve the soil with manure. This is chiefly done on the upper lands of Makla, Boira, and other villages of that circle, and of Mirgola, Monberh, and other villages of that area.

Weed which grows on poor land.

The double object of putting manure is apparently to save labour where labour is expensive, and to put heart into the ground where it is impregnated with salt, as most land on the east side is, and deprived of silt as it has for some time been. Manure is the only known cure for the *goria* weed, a mossy plant. It is of little use, and not so necessary, to manure the lower lands. They are richer, and any manure put on them would be diluted with the water and its benefit lost.

Sowing and planting.

3. Haimontik paddy is sown broadcast, and is also sown in a nursery and transplanted into the fields.

It is sown in the months of Bysak and Jeyt (April-May and May-June), and when transplanted is transplanted in the rains, *i.e.* in the months of Assar, Sraban, and Bhadra (from 15th June to 15th September. Sraban is the principal month.

There are three cases in which haimontik rice cannot be sown broadcast:—

(1) When the ground dried up early in the season (*i.e.*, soon after the rains).

(2) When it does not dry up at all.

(3) When there has been no crop on the ground the year before.

In the first case, the ground is too hard and dry.

In the second the seed will come to nothing.

In the third the weeds are so strong that nothing but ploughing up in the rains will beat them.

When haimontik paddy can be sown.

4. It follows, then, that the seed can be sown broadcast only in ground that has been under water most of the year and dries up two or three months before the rains. In the very wet ground that never dries up, if the rice is cultivated at all, it must be transplanted.

Planting.

5. Just before the paddy is sown, and just before it is transplanted, the ground is ploughed. The quantity of seed used for sowing is about 16 seers (or 8 annas worth) to the bigha. The plants, when planting is the process, are set 7 or 8 together about from 9 inches to a foot apart.

As soon as the rains set in the planting begins. Even where the soil is wet and never dries, the plants cannot be set till the fresh rain falls. They will not thrive in stale water.

Cost much the same on both sides the Saraswati.

6. It may here be noted that no material difference seems to exist between the seed and the labour necessary for a standard bigha and for a Burdwan bigha, which is a fourth larger. This may be partly accounted for by the fact that west of the Saraswati, where the latter is in force, the soil is free and easy to work.

Weeding.

7. After the paddy is planted, or where it is sown, after the rains begin, the fields have to be weeded. Weeding of sown paddy is more troublesome than that of transplanted paddy, because the weeds have grown up with the paddy undisturbed for months. When the paddy is transplanted, the weeds of the ground where it is planted are turned over with the plough and soon, before they gain strength, covered with water.

Harvest.

8. The harvest is the next stage of the work. This opens on the high lands in Agrahain (November-December), and the main part of it is done in Pous. The lower grounds are not clear of crop till Magh or even Phalgoon (January-February or February-March). I found during my enquiries, which were nearly all in the month of Pous, that the awal was being everywhere reaped, sometimes above, sometimes below. The harvest goes

down the slope of the fields, taking in order high seyam, high doim awal, low doim, and so on, or such of them as are on the land. It is all plain sailing till the awal is past. Then come the low lands.

Harvest in water.

Doim may be got in dry, but seyam and chaharam have generally to be reaped in water. The straw is of little use, being sour. The heads are fished out of the water and cut. In the case of dry reaping, the paddy, when cut, is laid in bundles (*atis*) on the ground for the natural moisture to dry out of the straw and grain. After lying for two or three days, it is carried off to the homestead, and either stacked and threshed after a time or threshed outright. If it is reaped wet, it has to be carried to some dry spot to lay down and dry, and the same process is then gone through.

9. There are several ways of threshing. The paddy reaped dry is generally threshed by dashing the bundle against boards till all the grain is separated. Paddy reaped wet is trampled out by oxen. The straw of the former (*khar*) is fit for market and stored. The process of threshing does not destroy it. The straw of the latter, being useless, is threshed in the way described. It is called *(pol)* or fodder and is, if in any way fit for use, used to feed the cattle. It is often unfit even for that, being sour.

Threshing.

The paddy, after being threshed, is winnowed and stored into granaries (or *mroais*). The straw, still in the bundle, is stacked for sale or for domestic use.

Section III.—*Labour required for each process.*

The quantity of seed necessary for a bigha of land is about 16 seers, and the value at seed time is about 8 annas. Where plants are valued, the same value is put on them, but that is only where planting is not common. Neither plants nor seed are commonly bought, but are kept in store by the cultivator himself.

Seed.

2. The manure, where it is used, is also very seldom got from the market. It is usually the cowdung got from the cultivators' own bullocks and cows. This is stored, and before ploughing time, is carried out by dhangars hired for the purpose. The quality of cowdung used for a bigha of land is about 50 baskets (in this way it is calculated) and the value may be set at about one rupee. The article is so seldom bought, however, that there is no fixed market rate. The weight of 50 baskets would

Manure.

be about 25 maunds. It is calculated that the labour of carrying this is about two days' labour, but that, too, varies with the distance of the field from the homestead.

Ploughing.

3. The labour of ploughing a bigha of land seems to be much the same on both sides of the Saraswati, though to the west the bigha is one-fourth larger than to the east. This may be accounted for by the fact that the soil on the west side is free and not so heavy, and therefore more easily worked. In the villages to the south, where there is excessive water, the labour of ploughing is greater, partly because it has often to be done in water and partly because the moisture in the ground, lasting all the year round, causes more weeds to spring. The normal number of ploughs used is 4 to the bigha. In only three accounts out of 28 was a less number (3) given, viz., by the Gungadhurpore naib, whose account is evidently too low throughout; by the Chatto Boira people, where much land has gone out of cultivation for want of labour; by the Bashye people, where labour is dear and rents are low; and by the Jagonathbatty people, where the talookdar was present, and where the soil is unusually high and light. The number of days' ploughing may then be taken at 4, and from one to two may be added for special cases in low-lying and badly drained land. In ploughing, the plough is worked by a pair of bullocks and a man till about 11 A.M. The ground is then gone over by the same man and team with a harrow (*mai*), which is a small ladder-shaped toothless implement, on which the man stands.

Sowing.

4. For sowing the labour is generally included in the ploughing. It takes the labour of one man to sow a bigha.

Planting.

For planting the labour varies according to the distance of the field from the nursery, to the quantity of water on the land, to the weather (a man will not work in very heavy rain, but the day must be paid for if he is hired). Sixteen accounts of this have been given. Averages were taken in each place, so the amounts actually stated are probably in each case averages representing a less amount of labour in fields favourably situated and a greater in fields unfavourably situated.

The normal amount of days' labour seems to be about five. It is never less than four, and in only one case is six, and in one above it. It then probably varies from four to six, according to situation and

circumstances. As before, the labour is heavier in the deep bils which never dry. On the other hand, in Jagonathbatty village, where the land is high and light, the *ails* or boundary ridges of the fields have to be looked to, and it is reckoned that two days' labour are wanted for this It is, of course, to keep the water from draining off too soon.

Weeding.

5. Weeding after sowing involves a very uncertain amount of labour. Much depends on the season, which varies from year to year. If any average can be taken for such a varying quantity, perhaps ten would be a fair average. The number of days' labour seems to depend much on the chance of getting it cheap, for men seem unwilling to hire. Thus where there is much competition for labour, weeding is comparatively neglected; where there is nothing else to do, it is better attended to.

Weeding after planting is more uniform; the ground is ploughed down, planted, and soon covered with water. A scanty rainfall would involve more weeding. The normal number of weeders on both sides of the Saraswati is about three. The heavy soil of the east being more prolific of weeds, may be set against the larger bigha of the west.

Reaping.

6. Reaping depends more than any other process on the quantity of water on the ground.

To reap, lay down to dry, bind and carry to the homestead, when the ground is dry, as is usually done with the best rice and the inferior rice on a higher level, takes on an average from six to eight days' labour.

Reaping in water.

For the low ground, the cost is given at amounts varying from this up to 16, and in one case up to 19. It may be taken that the cost of harvest is doubled by the crop having to be reaped in water. When reaped in water, it is generally reaped into a canoe, because if there is not water for a canoe, the cultivator will often prefer to wait till the ground dries. The main cause of difference is, of course, the necessity of carrying the wet straw to a dry place, and spreading it out there instead of on the field.

Threshing.

7. Threshing, including winnowing, takes about three days' labour to the bigha. In places it is given at two, and in others at four. This again seems to depend a good deal on the demand for labour, for where a man does his own threshing, and there is not much else for him to do, he will often thresh more carefully and take longer over it, and perhaps take more

care over the winnowing. Skilled workmen, again, will do their work in a shorter time, for I have noticed it is not everyone who can winnow. The paddy is taken up in a flat scoop and thrown up so as to fall on the heap; gravity causes the grain to fall under the chaff, which is then fanned off with the scoop. Two men ply the fans after each quantity of grain thrown on, and the work is one in which skill makes a great difference. In threshing with bullocks, the men's labour alone was generally taken into consideration. Winnowing is also done by letting fall in the wind, but all homesteads are not exposed to wind, and the wind does not always blow. The straw is stacked on one side at the time of threshing.

8. From the above account it will be seen that the quantity of labour at all stages depends chiefly on the water and therefore on level.

Section IV.—*Cost of Labour.*

Cost of labour to ryot.

It is not at all easy to calculate the cost of labour to the cultivator. Manifestly he does not reckon his own time at the same rate as that of hired labourers. It is, however, necessary, as will be shown, to take into account the rate of labour in each village.

The rate of labour depends much on the opportunities of employment, otherwise within reach of the labourers' home (for the class of agricultural labourers generally have a little land and a homestead of their own). It varies also with the demand. Thus labour at harvest (or *Pous* labour) is expensive, the demand being so great. The custom is to give so much in money and a little refreshment (*jolpan*, tobacco, and oil). These are all reckoned in the rates given.

Rate of wages for hired labour.

2. The general rate of labour is 4¼ annas daily. In one or two villages it is given as low as 4 annas. It rises to 4½ annas, 5, and 5¼ annas daily. In Kistorampore, where the daily wage is 4 annas, the monthly wage is Rs. 5 and board.

In Gerolgacha the daily wage is 4¼ annas, and 5¼ in harvest time. The agricultural labourer gets Rs. 7-8 monthly without his board. Only those with large and varied cultivation are able to keep servants of their own, as they would not have employment for them all the year. The daily rate near the towns, or near centres of labour (*e g.*, the pán gardens of Begumpore, Adan, and Tazpore, which must employ about 500 men steadily all the year round) is highest, and reaches about

Rs. 10 monthly. The rate of 4 annas daily is equal to about Rs. 7-8 a month. The monthly wage seems to be about 75 per cent of the wages for a month reckoned at a daily rate.

Bhág ryots.

3. There is another test. Whereas west of the Saraswati, where labour is generally cheaper and the land more productive, a man will take land in *bhág* (*i.e.*, on condition of giving a share of the produce), and agree to give half the entire produce doing all the labour; in Makla, Mirgola, and other villages, where the land is not so productive, he insists on having half the cost of the harvest, otherwise he will not, in some places, take the land at all, and will in some keep all the straw, giving half of the grain only, and in others keep three-fourths of the crop giving one-fourth only.

Income of bhagidar.

4. Now the cost of the harvest is about eight days' labour (say 7) at 3 per rupee, or about Rs. 2-5. Half of this is Rs. 1-2. The value of the straw again is calculated at from Rs. 2 to Rs. 3 per bigha, say Rs. 2-8, half of which is Rs. 1-4. The value of produce is roughly about Rs. 7 (if not manured) sometimes more or less; but as no land is apparently ever taken on better terms for the lessor by a bhagidar, moderately good land must be reckoned Half of Rs. 7 is Rs. 3-8, and Rs. 1-2 added is Rs. 4-10, Rs. 1-4 added for half the straw is Rs. 4-12. Three-fourths of Rs. 7 is Rs. 5-4. It may be reckoned, therefore, that a bhagidar values his labour (which never includes manure) at about Rs. 4-12 (say) for a bigha. This represents (to put it high) four days' ploughing and 20 days' labour, or, say (allowing for broken days), about 28 days, which would come to about Rs. 5 a month. *Bhagidars* are generally cultivators who have some land of their own, but not enough to keep them occupied. They are, therefore, probably inclined to take land like this, which involves no risk, and employs them when they would otherwise be idle at a cheaper rate than if they depended on it. An addition of Rs. 2 a month being made for this, will bring the value of a cultivator's time up to Rs. 7 a month, at which I will reckon it. It is difficult to calculate exactly the value of a cultivator's individual labour, for the better class of cultivators depend more on expensive crops like sugarcane and potatoes, into which the element of capital largely enters, and the smaller cultivators hire themselves out as labourers in their leisure time

Conclusion as to wages.

Bhág and korpha ryots' probable clear profits.

5. A "bhagidar" does not, by cultivating the ground, acquire any rights in it. A "korphadar" again, or sub-tenant paying money rent, is generally held

by custom (and I believe sometimes in law too) to have a settlement in the land. Korphadars generally hold of such as are not likely to take up the cultivation themselves, that is, Brahmins and non-cultivating ryots, ryots having very large jotes, and such men. They are likely to give a higher rent for this privilege. They are not hampered, as the direct ryot usually is, with the necessity of giving up their whole jote and with it their home in case of their not coming to terms with the superior. They have thus a greater freedom. They very seldom pay more rent than will leave a margin of about Rs. 5 on each bigha.

6. It is necessary, then, in each village, after ascertaining the amount of labour necessary, to calculate each class of land, to apply to it the value of labour found and to calculate in this way the cost of production.

7. The labour of ploughing involves also the cost of keeping cattle. This depends more or less, not only on the food necessary to maintain bullocks in working condition during the working season, but also on the food available for them. The rate generally set for the labour of a man and a pair of bullocks is about eight annas, sometimes six. This is not for so long a day as a day-labourer. It is in some places (chiefly where there is large cultivation of paddy compared to other crops) at six annas. There the ryot keeps his bullocks for his own use, and hires out for days when there is little to do. They also have much land to graze on (paddy land) in the cold weather and up to the rains. The want of grazing grounds no doubt makes the keep more expensive. This will be again touched on further on. The regular hire of a ploughing team in the season is probably not less than eight annas. Sometimes it is more, when competition is keen.

Plough oxen.

Section V.—*Outturn.*

The question of outturn is almost impossible to settle satisfactorily in the course of one season's enquiry. I have endeavoured to make the results as nearly as possible correct by multiplying cases and making allowances as far as possible for circumstances.

Summary enquiry of little use.

2. I tried to obtain results first by getting at the general outturn as estimated by the villages and gomasthas and then by testing in the way prescribed, viz., marking out a specimen, threshing, and weighing.

Threshing and weighing.

Test by taking statements beforehand.

3. The result of the comparison was frequently to show that the calculations were correct, but sometimes the estimates were found to disagree with the weights found. This would generally be put down to the water which, owing to the unusual rainfall in Assin (September-October), this year favoured the higher lands. The lower lands did not suffer very much, as the whole season's rainfall was not unusually heavy.

Paddy in water.

4. In the case of specimens of the lower land, I was obliged to have them threshed damp, and the results were not satisfactory, the dryage allowance in some cases being as much as half. I could not have the wet sheaves dragged after me all day (they were so heavy), and I could not wait by them till they dried (it would have taken days).

Baboo Peary Mohun Mookerjee's estimate excessive.

5. I would note, to begin with, that the estimate made by Baboo Peary Mohun Mookerjee in his conversation with me of the outturn of good paddy land appears to be excessive for this district. His estimate was 12 to 15 maunds of paddy at Re. 1, and a kahan of straw at Rs. 4, the total value being Rs. 16 to Rs. 19 per bigha.

Results of actual experiments.

6. The only land I found anywhere approaching the outturn given was the awal land of Gungadhurpore, where the bigha, being measured by the 20 inches cubit, is one-fourth larger than the standard. Here the estimated outturn of paddy was 12 maunds to the bigha and of straw a kahan, value Rs. 12 and Rs. 4, respectively. The actual outturn of paddy was ten seers short of the estimate, and the value of outturn was thus Rs. 12-10 on a standard bigha.

Out of 101 accounts of outturn of paddy, 61 of which were obtained by weighment, and most of which were of awal land, there exceeded eight maunds per standard bigha only two specimens, viz., Gungadhurpore and Tajpore, at 9 maunds 15 seers and 8¾ maunds respectively. Three more reached 8 maunds, 13 more are of 7 maunds and over, and 19 more are of 6 maunds and over. The awal of one village is not the same as the awal of another.

Prices.

The value of the paddy is not invariably a rupee, that is the highest value, and is in force in most of the villages to the east of the Saraswati, but it is given as the rate in five only of the villages west of the Saraswaty. The value usually given is 14 annas, sometimes 15 annas, and often 13 and 12 annas.

Dry measure confusing.

7. The question of value is much confused by the habit of calculating in dry measure, which has to be translated into weights. The soli contains 20 palies, the pali four rakes, and the rake four koonkies, but the size of the pali differs, so that I have found the soli in some places reckoned to weigh 2½ maunds, in some 3, 3¼, 3½, 3¾, and even 4 maunds. There is never any guarantee that the rates given are correct, the idea being vague. It is, however, usually the case that the rice grown in very moist and marshy ground is coaurse and contains more husk, and consequently fetches a lower price.

Outturn varies with size and weight of heads rather than number of stems.

8. The outturn of straw too varies in bulk and value. I believe, though I did not feel it to be advantageous to spend too much time in enquiring that the number of paddy stems sent up on any given area of ground does not materially vary. It is, I think, somewhere about 1,800 to the 100 square feet. The straw, however, varies in thickness and length, and will make big or small bulk for the same space of ground. It fetches high or low price according to its quality. The average value of straw on the threshing floor has in no case but one been given at over Rs. 4 per kahan. It is more frequently Rs. 3-8, 3-4, 3, and under. The straw of low ground is of little value as the water makes it sour, even when the rice is left good.

General calculation cannot be made.

9. No general calculation can be made by which the outturn can be made out over a large area. The permutations and combinations between varying quantities of labour, rates of wages, outturn of paddy and of straw, and their values would make a very complicated problem for solution much too complicated for finding any general and simple way of working it out.

ACCOUNT OF CULTIVATION OF JUTE AND KOLAI.

Section I.—*Land.*

Land.

Jute and kolai are produced on the same classes of land, and are alike in that they will grow on any land above flood level, or sona land as it is called. Jute has quite taken the place of aus paddy as the principal crop of the higher lands. It is grown in the rains in every village on all lands not occupied with sugarcane and baigun.

2. There is no such decided distinction between classes of land as in the case of haimontik paddy. Jute must not be submerged in the rains, and that is the only limit. It is planted on high sali on the chance of its escaping, and sometimes a crop of jute and of haimontik paddy can be got off the same land, but at great risk, as all the expense of ploughing, manuring, sowing, and weeding must be undertaken before it can possibly be known that the crop will come to anything. In such a year as this, when the rain held off till the jute was ready and then fell very late, it has been possible to secure the jute unswamped and the paddy unwithered, but such a state of things seldom occurs Jute may be called the distinctive crop of "sona lands." Kolai also is the main cold-weather crop on "sona" land, by which I mean all land above flood level that is used or fit for cultivation. Kolai is now and then sown broadcast over high sali land after the rice has been reaped. If, as often happens, the haimontik paddy came to nothing owing to the ground drying up too fast, the kalai may do a little good. If the strength has gone into the rice, the kolai is a failure. Jute before, and kolai after haimontik rice may both be cultivated in one year. Either the rice or these two will ordinarily be a failure.

Classes.

Several crops.

SECTION II.—*Process of Cultivation.*

In one or two places, where the price of labour is high and the soil not so well suited for its growth, kolai is not always cultivated. In such places the ploughing must begin in Kartick, and the land is again ploughed later on. Where the Kartick ploughing takes place with no intermediate crop (*e.g.*, kolai), that is the first process.

Ploughing.

Land.

2. In Cheyt (March-April) fresh earth dug up from the ditches or tanks is laid on the ground. Where that cannot easily be got, cowdung is spread as a substitute In some places (*e.g.*, Kumirmora and Romanathpur) no manure is used.

Tank and ditch soil.

Cowdung.

3. After the first shower of rain (in Bysak usually) the ground is ploughed and harrowed and the seed sown. After the seed a little oil refuse is sometimes put on the ground, but that is not usually done.

Plough and harrow.

Manure.

4. The weeding has to be done twice, sometimes three times. After weeding the jute is sometimes thinned out, some of the weaker stems being removed.

Weeding

The first weeding is in Bysak (April-May), and the second and the thinning in Jeyt (May-June), just before the rains.

5. Nothing more is done till the cutting, which is in Bhadra, after the haimontik paddy has been planted. The jute is cut, stripped of leaves, the stems tied into bundles, carried to water, and there steeped, being held down with weights of turf. After being steeped for a time, it is beaten out and the fibre extracted from the stem. The fibre is cleaned and hung up to dry. When dry, it is put first into drums, ready for the market. The cast-off stems are used largely in pan plantations, where they exist, often for thatching houses or fencing fields of vegetables, and often also as part of the fuel with the cane leaves, for boiling the sugarcane juice into goor. They are also used as fuel.

Cutting.

Steeping and beating.

Drying.

Use of produce.

6. Cultivation of kolai is very simple. In Kartick the ground is ploughed and the seed sown, and in Magh it is lifted and the grain trampled out by bullocks. The grain is kept for sale. The straw (or gola as it is called) is mixed with the cattle's food.

Kolai.

7. It is worthy of notice, however, that there are many kinds of kolai, and it is cultivated with many degrees of care. The chief kinds cultivated in earnest are "mooshoor" kolai and pease (mathar). The seed costs more. The ploughing is more careful. The outturn is better and more valuable. Sometimes, however, the kolai is only cultivated to keep down the weeds. As, for jute, the ground has to be ploughed in Kartick, crop or no crop—this crop is grown to take up the ground. Very little seed is used and little crop is obtained. The cultivation of kolai, however, is here intended to mean only cultivation for its own sake, and not merely as a warming pan for jute.

Different kinds of kolai and different care in cultivating it.

SECTION III.—*Quantity of Labour, &c.*

The cost of manure appears in 14 out of 23 accounts.

It is not quite certain if manure is put in other places than those mentioned. From the papers I should say probably not, as in all the villages where the account of manure is omitted, excepting only Kumirmora and Romanathpur, the crop is less. In these two villages the crop is pretty good,

Cost of manure.

but the labour spent is great and the crop (not very extensive) generally alternates with sugarcane or potato, both well manured.

2. I will not take it as necessary to spread both new earth and cowdung. They seem to be alternatives and not combined for the same crop. The addition of oil refuse after sowing seems to have a good effect. But it appears not to be generally practised. Where it is put there is generally some other crop in which much of it is used, or in such places the jute land is of large extent, and there is not cowdung available (*e.g.*, Adan). It may be taken then that the usual manure applied, when any is given, is about 50 baskets of cowdung, or as much as three men can spread in a day, or as much fresh earth as eight men's labour for a day can throw up.

Seed.

3. The quantity of seed is hardly worth taking into account in view of the great variations of labour otherwise. It is not generally bought, but is kept in store. The value is set at from Re. 1 to 2 annas, and is least where the crop is most largely cultivated. It may be put at 4 annas worth (about 2 seers).

Ploughing.

4. Ploughing (leaving out of account the *Kartik* ploughing, which is peculiar to one or two villages) appears to occupy on an average five days per bigha. Less apparently cannot be allowed for careful cultivation. In many places four is given as the number, but never less, while six is given as often, and even eight in three places.

Weeding.

5. Weeding is a very laborious process. The number of days' labour for this is given at from 6½ in Chota Boira to 24 in Monberh. Chota Boira is, as explained before, deserted for want of labour. The next lowest number is 10. Probably the best average to take is 15—remembering that it is an average—and one field needs less, another more. If there is much rain in May and June, that means much weeding. The application of manure seems to have a distinctly good effect on the labour of weeding, reducing it.

Harvest.

6. Cutting, stripping, steeping, beating out, and drying constitute the processes of the jute harvest. The amount of labour for these varies from 11 to 22. Here, however, it is to be noted that the labour of hanging out to dry is not counted

by all on the ground that it is usually done by the household. But, as one pointed out, there are not always women and children at home to do the work. I think, even if women and children do it, the work should be counted. This would make the smallest number 13 instead of 11

Cutting and stripping

7. The labour of cutting and stripping does not admit of much variety; it is, however, manifestly greater in a good year, and worse when the crop is scanty. The calculations of cultivators must also be taken with caution, as they also have to calculate first from their own knowledge, which is gained from plots of varying sizes, then from the average of fields, and then from the average of seasons. A labourer, too, may not in some places do so good a task as in others. Allowing for varieties of opinion and place, 5 may be taken as an average, (again be it noted, only an average number), the number varies from 3 to 6.

Steeping

8. The labour of steeping depends much on the facilities of water. The number of days' labour given for this is generally greater in dry villages where water is scarce, and the jute has to be carried a longer distance. In the villages on the bank of the Saraswati river steeping jute in that river has recently been forbidden, and the order has caused much discontent, increasing as it does the cost, and in some cases almost putting an end to the possibility of steeping altogether. Owners of tanks and ponds, too, are becoming more and more unwilling to give them up for steeping purposes, as the practise undoubtedly pollutes the water and kills the fish, if any. It is given at from 2 to 8, and for such an item it is impossible to generalize. To carry heavy bundles of jute a little further or nearer must make a great difference in the cost—5 is the number usually given, and 4 and 6 next to it.

Beating out.

9. The labour of beating out is for less reason given at different figures. The numbers given are from 4 to 8, and may vary on account of carefulness in beating out and other matters. Where the cultivation of jute is most extensive, 6 is the number given. This may be taken as an average and perhaps 1 added for a heavy crop and deducted for a light one.

Drying

10. The number for drying, where given, is invariably 2 That may then be taken without discussion

11. The average labour, then, of jute cultivation may be taken as follows :—

Cowdung	50 baskets.
Spreading	3 men.
Or throwing up new earth	8 „
Seed	2 seers.
Ploughs	5
Weeding	5 men.
Cutting	5
Steeping	5
Beating	6
Drying	2
Total manure	50 baskets.
Seed	4 annas.
Ploughs	5
Men's labour	36 or 41

But this average cannot safely be applied to any particular cases without enquiry.

12. The cost of cultivating kolai, as I explained, varies much. The quantity of seed where the ground is not fully sown is less. For different kinds of kolai different quantities of seed are needed. The principal kinds of crop in this district are "mooshoor" and peas. The quantity of seed usually given is about 16 seers, and that may be taken as the seed necessary to get a full crop.

Kolai.

Seed.

13. The quantity of ploughing is given at from 2 to 6. The average is about 4. Anything less seems to produce a defective crop. It is the amount necessary to plough a bigha of land for other crops ; 4 ploughs may be taken as the average, or rather the least possible number for defective ploughing. Better care still would probably be rewarded with a better crop.

Plough.

14. For lifting and threshing (which must be considered together) the number is given at from 4 to 9. The usual number is 6. For a scanty crop one less is necessary and for a heavy crop one more. Distance from the homestead and careful threshing may also add to the labour. The maximum may be 8.

Harvest.

SECTION IV.—*Cost of Labour, &c.*

Not much is to be added to what has been said on this head in the section on paddy.

Value of cowdung.

2. The value of cowdung manure may be put at the same as that for paddy, viz., Re. 1 per 50 baskets. The same remark still applies, viz., that there is no regular market rate for it. The value of oil refuse is given at from Re. 1 to 1-5 per maund. Oil refuse, as is given to cattle for food, generally costs about Re. 1-8. That used for manure is stale and is cheaper. Probably where other crops, such as potatoes, sugarcane, pan, &c., which need manure, are extensively cultivated and jute comparatively little, the oil refuse left over from these is used, and then it is cheaper both as being older and as being more easily imported. It is not used regularly enough to form any general theory about it. I would put the average price of moderately fresh oil refuse fit for manure at about Re. 1-2. In the season, rather before the time it is needed for jute, it is about Re. 1, and later on goes up to Rs. 1-4. The price must depend somewhat on the state of roads and facility of import.

Oil refuse.

Hire of ploughs.

3. The cost of ploughs is sometimes higher in the jute-ploughing season owing to the demand. This was noticed at Begumpore, near which much jute is grown. (Jute crop almost as large as haimontik paddy. In Adan much larger.)

Hired labour.

4. The cost of hired labour has been already fully discussed under the heading *Haimontik* paddy. With reference to jute, the bhagidar, when he takes land in 'bhag,' takes half the crop and receives half the cost of manuring, cutting, steeping, beating out, and drying. Thus for half the crop he provides 5 ploughs and 24 days' labour. In addition, if earth is thrown up, 4 days' labour; if cowdung spread, 25 baskets and 1½ days' labour; if oil refuse, say, ¾ or one maund. The outturn he may expect is about Rs. 6 worth. The value of 4 days' labour being taken at Re. 1-1; of 25 baskets of cowdung at 8 annas, and of the oil refuse at Re. 1, the cost to him of all three is much the same. The net income, less expense of manure, &c., would be Rs. 5 for perhaps a little over a month. Most of the labour is at a time when there is no demand for it. The bhagidar then values his time for that period at, say, Rs. 4-8 monthly.

But it must be remembered that a man works much harder on his own account than for others, and so the actual time occupied may be less.

Section V.—*Outturn.*

Outturn.

The outturn per bigha (standard) seems to be not so good on the west side of the Saraswati as on the east. This crop depends more than rice on careful cultivation, and hard work is rewarded by a good crop. Some manure on almost all soils is necessary to bring it on. The average outturn given in about 20 accounts for good cultivation is 4½ maunds on the east side and 3½ on the west. The outturn fluctuates with the season. The bigha on one side produces about the same quantity as the bigha on the other, though they differ in size. The outturn of kolai may be taken at 2 maunds.

Value.

3. In value there are great fluctuations. A year or two ago the value was up to Rs. 4 per maund. This year the jute was sold for Rs. 3, and has now fallen below that in price. Where have been great ups and downs in the market. The present value may be taken at Rs. 3. Where it is less, the bad colour of much of the local jute owing to want of clear water for steeping may be to blame. The value of kolai may be taken at Rs. 2 per maund.

Summary.

To sum up the five sections, probably the classes of jute land do not differ materially, though the richer upland soil on the east side may be better than the lighter soil to the west. The chief distinction must be in the facility for steeping. Jute is usually grown on the land not appropriated to sugarcane, or as a change crop to sugarcane. It is also the rainy season crop on potato land. The least valuable sona land is given to it.

The distinction between one kind of sona land and another, and between sona and "danga" where danga is a separate class, is like that between classes of rice land, one of level in the same village. The habitual use of manure on the land makes its original qualities of less importance, and sinks into insignificance all distinctions but those of level (for the village) and nature of soil (for the whole region round about). The latter distinction for "*sona*" land is chiefly between Hooghly silt and Damoodar silt, and in the case of this crop the distinction is in favour of the Hooghly.

CULTIVATION OF SUGARCANE.

SECTION I.—*Land.*

Land.

Sugarcane grows on every kind of land above flood level. It can be generally cultivated wherever jute can be cultivated, and almost in places too low or too high for jute.

Preparation of ground.

2. The ground has to be prepared. The least elaborate preparation is merely to dig a ditch round the land to be adapted for sugarcane and to throw up the soil from it on the land. This ditch is afterwards used as a reservoir for richer earth (dead vegetable matter, &c., collecting in ditches) from which every year the soil is taken and spread on the field. The bank of a tank is also used. Such places of course are limited in area, and can form only a small proportion of the ground. Where the land is high no ditch is made, but the land is cultivated as it lies.

May be subject to flood.

3. The land is not necessarily wholly exempt from flooding. In Makla, the chief seat of sugarcane cultivation, much of the land is subject to flooding at high tide. In some badly drained land the water stands for days together to the depth of a foot. On heavy land the cane will stand this for a week, on porous soil for a fortnight without suffering, but not longer.

Irrigation.

4. It is not always necessary to irrigate. On heavy clayey soil which retains moisture, the cane does very well in an ordinary year without irrigation, and accordingly the crop can be, and is habitually cultivated on land out of reach of water for irrigation. If no rain falls the crop is apt to wither, and this I saw had happened to much land in Makla.

5. The withering of the crop in Makla was due also to the poor nature of the soil. There is, in most parts of Makla not artificially fertilised with soil raised from below, a surface coating of soil over a layer of sand, and then a layer of clay and kunker. This does very well in ordinary years, but long drought dries it up down to the clay, when the plants wither and die.

Sugarcane land in Makla, &c.

6. The sugarcane land in Makla may be divided into two classes, viz. artificially raised soil (of the black alluvial soil which underlies the poor undersoil, and the natural soil. The whole of this soil is heavy clay soil, retaining moisture. The general characteristic of it is that it does without (though all the

better for) irrigation. Thus the only irrigation that is said to be done on the east side (towards Makla, Boira, Roghunathpore, Basipota, and Kooshaigacha) which between them have about 450 bighas of sugarcane crop yearly (or 900 under cultivation), is a little on tank sides in Makla and some in Boira. The extent of Boira land under cultivation being only 10 bighas, or five yearly, probably only special land lying well for irrigation is cultivated there.

West of Saraswati.

7. Of this class also is some land to the west of the Saraswati. Irrigation is less frequent in the heavy lands to the southwards and near the Saraswati. It is necessary and more frequent in the light porous soil of the Damoodar silt on the Kanna Nuddi. In general it may be said that sugarcane can do with a limited supply of moisture. It is the better for a great deal. Heavy clay soil with the help of occasional showers retains enough for its survival without artificial aid. Porous soil dries up too quickly, and must have the help of irrigation. But it is always better to irrigate where possible. Thus the classification according to water must be between irrigable and non-irrigable land on the heavy clay (or Hooghly) soil described in the general classification, and between irrigable land lying easy for irrigation and the reverse on the porous Damoodar soil.

Section II.—*Processes of Cultivation.*

Planting.

The variety in these processes is very great. The processes which are common to all the systems are the following:—First the planting. The plants used are cuttings of sugarcane about half a foot long, which are dropped into holes made for them, with some oil refuse. The holes are in rows, which stand about a yard apart, the plants being about half that distance from one another.

Ploughing.

The ground has previously been prepared with plough and harrow. The plough is passed over it in the mowing, and the harrow is then taken over the ground ploughed the same day.

Irrigation before ploughing.

2. On the lighter soils the ground is irrigated before being ploughed. Where there is no irrigation, the water for planting has to be brought in pots from a distance. Where there is irrigation, the irrigation begins soon after planting.

3. The season for planting varies. In the heavy soils, which do not dry up soon, the planting season is as late as Magh (January-February). If it is sooner the plant rots, and if later it withers. But it may be taken that the season varies with the year. If the rains fall early, the soil will be ready all the sooner. The proper time to take will generally be when the soil is just dried up on the surface and to a certain depth below it.

Planting season.

4. The next process is irrigation, and the cost of this depends much on the season. If there are showers it is less frequent. If not it has to be done oftener. It is chiefly in the four months preceding the rains (Phalgun, Cheyt, Bysak, and Jeyt), *i.e.*, from the middle of February to the middle of June that irrigation at this stage of the crop is adopted. After each irrigation (the preliminary operation of which is to draw little runnels for the water to pass along), the ground must be hoed, as otherwise it hardens round and nips the young plant. Where there is no irrigation the ground is hoed three or four times over, especially after rain. Where it is possible, fresh earth is spread among the young plants in the month of Cheyt, or about that time, when the water is low and soil procurable.

Irrigation.

Hoeing.

5. Just at or before the beginning of the rains (near the middle of June or the beginning of Assar), the next process comes on. The roots of the young plants, which have now made some progress, are cleared out, old leaves, &c., removed and manure (mustard oil refuse) laid at the roots. This is then carefully earthed over. The work is unpleasant, as the sharp leaves are apt to wound the workman. For the next five months (Assar, Sraban, Bhadra, Assin, and Kartik) the leaves are usually once a month twisted round the stems of the cane, the object being to prevent the jackals getting at the cane and gnawing it. As soon as they are large enough, the plants are tied together with leaves at the top with the object of preventing the tall and flexible plants from falling over on the ground, which they would do if left to stand alone.

Binding.

6. After the rains it is the custom in some places to weed the field; in others this is not done. Where possible it is now usual to irrigate the cane as much as can be done. Where there is no water, the cane has to be cut as soon as the sap begins to

Weeding.

Irrigation.

leave the ground, that is, about Agrahan and Pous. But the season for cutting and crushing can be extended to the months of Magh and Phalgun, and even Cheyt (middle of April), by watering freely. After a certain time watering does not improve the crop, but it is sometimes necessary to keep it standing longer for want of labour.

Cutting, crushing, and boiling.

7. The cutting, crushing, and boiling into goor are all done at the same time. A place is prepared within easy distance of as many fields as possible, generally by four or five cultivators, who combine for the purpose. They erect sheds for storing the goor and for sitting in and taking meals, &c. An oven is also prepared, being a long furnace, built half under, half over the ground, of clay. The furnace lies conveniently for the wind that is likely to prevail at the time. There are four or five openings on the top, into which pots are fitted.

Cane crusher.

8. The cane crusher is sometimes hired, sometimes bought, sometimes made The old-fashioned crusher was of wood, and was made by a syndicate of ryots, who bought the wood and engaged a carpenter to make it up. The wooden have been beaten out of the field nearly everywhere by the iron machines. Here these are of several different patterns, almost all imported from Howrah They cost from Rs. 70 to Rs. 90, and consist of two upright cylinders between which the cane passes. There is a wooden guard to keep the hand from being drawn in, and an iron tray to catch the juice and direct it outwards. It was this iron tray sometimes getting out of order that prejudiced some ryots against the iron crusher. They said no local blacksmith understood it.

9. The motive power is the bullock, of which from two to three pairs are kept in reserve. The iron mill is especially popular, as the bullocks could not easily drag the wooden mills, which come to a standstill occasionally, while the iron crusher moves smoothly and regularly. The crusher is fixed in position by its legs being buried in the ground, and is turned by a bar passing over the top. The bullocks are relieved from time to time. The old fashions seem to have died out. I used to see all sorts of patterns of wooden crushers, some were horizontal and were turned by levers worked by the hand I have seen men tearing away at these, and getting a purchase for their feet against clay pedestals set up for the purpose. Others were vertical with

wooden screw fittings. A sugar mill used to be heard a mile off; now the work is silent.

Labour at mill.

10. When the work is in full swing, there is one set of men cutting cane in the field; these strip the leaves off the cane, cut the heads off for cuttings, and carry it to the crusher, where it is chopped into lengths of about two feet, convenient for passing through the crusher. One man sits in front of the crusher and feeds it with these; another receives them at the other side. The lengths are generally passed twice through the crusher, when they are completely expressed. This is the main superiority of the iron-crusher over the wooden, which could do as much work in a day, but was very clumsy, and did not take the juice out completely.

Boiling.

11 Another set of men are engaged in boiling. One stokes the furnace and another boils the goor, while there is a third to look after it later on. The furnace is fed with dried sugarcane leaves, the refuse of cane after crushing, the stems of jute after the fibre has been extracted, and brushwood. The boiler has to be adding cane juice, from time to time taking out the goor when ready, skimming the surface of the liquor, ladling here and there. The man in the shed looks after the goor, puts it in the jar, and so on. Each pair of bullocks has its driver, and these, when their bullocks are off duty, help in feeding and tending the crusher. The daily outturn is on an average 2½ or 3 maunds of goor, sometimes as much as four.

Outturn

Produce how disposed of.

12. The goor is sold to mahajuns. The cultivation of sugarcane being one which needs some capital, it is frequently (but not invariably) the case that mahajuns advance the capital, taking their profit either out of interest or out of the larger measure or lower price at which the ryot sells them his goor. It is manufactured into sugar or used for domestic purposes in the villages.

Produce sold from field.

13. Sometimes the sugarcane is sold as it stands in the fields for export to Calcutta or the towns, to be used in the raw state; sometimes the ryot takes a stem or two to the bazar with him and sells them to buy his household supplies.

When sold wholesale raw it is usually sold by the kahan, 16 pons= 1,280 stems.

How long cultivation lasts.

14. It will be seen from the above account that the sugarcane crop occupies about a year and a half to bring to maturity from the time when the ground is broken up till the time the cane is cut. The old "Bombay" cane occupied the ground only a year, viz., from Cheyt to Cheyt. The roots of the plants cut sent up shoots for a second year, so that the same plants yielded two crops. Suddenly, however, about 20 years ago, this, which was a much better kind of cane than that now grown, was blighted and has completely gone out of cultivation. The present kind of cane, as has been noticed, takes longer to cultivate, and does not yield so good an outturn. It too suffers from enemies such, as caterpillars.

Ground exhausted.

Alternative crops.

15. Wherever it is possible, the ground is allowed to rest for two years, or not less than a year and a half after a crop of sugarcane. The cane is both exhausting to the land and expensive to the ryot, and where alternative crops are possible the land always rests. The various alternative crops are aus paddy, jute, and baigun for the rainy weather, and potato, kolai, and potul for the cold weather. In respect of alternative crops by far the most productive is potato. That crop grows only west of the Saraswati or on the "tora" land in its bed. The west of the Saraswati has thus a great advantage over the east. In Makla, the ryots are compelled, partly on account of the want of a suitable alternative, partly because the rents are too high to enable them to afford an interval of rest, and partly because they are mostly in debt, and unless they cultivate the cane have no security to offer (the cane crop is their security) to cultivate the crop of cane year after year. The interval of six months is occupied with the cultivation of '*dhoncha*,' which is made use of by pan cultivators as supports for the plants. If not sold, it is used as fuel. In consequence of this constant strain on the resources of the soil, the crop of sugarcane is said, and appears to be becoming more stunted and bad yearly. There is no doubt that the land is suffering seriously.

Sugarcane is frequently planted among potatoes, *i.e.*, the rows of cane between the rows of nearly ripe potatoes. The cost of ploughing, manure, and of the first irrigations is then less.

SECTION III.—*Quantity of Labour, &c.*

As regards this there is very great variety. It will be convenient to divide the consideration of this into several heads. The first will be what may be termed the ordinary process of cultivation, including the labour of ploughing and the usual processes, except those next named. Next there is the capital cost, including value of seed and manure, and with this may be taken the cost of spreading manure, where that is a separate charge. With this, too, may be taken the cost of fencing.

Classification of labour.

Then comes the cost of irrigation. Last of all is the cost of cutting and crushing and boiling off, with which sugarcane cultivation generally comes to a close.

2. The ordinary labour then is first to be considered. That consists of (1) ploughing, (2) planting, (3) making ridges, and hoeing, (4) opening out the roots before the rains, clearing, putting manure, and earthing over, and (5) breaking back the leaves and binding them round the stems. In some cases weeding after the rains.

Ordinary labour.

3. Ploughing in this case, as in that of jute and paddy, varies. The various numbers of days' labour are given at 4 to 8. The land being rather harder and drier than at the season of paddy and jute land being ploughed, the number, which is out of 16 accounts most frequently given, and which is also the average, viz. 6, may be accepted as correct. A crop like this, it must be observed, however, gives much more scope for high cultivation, and it is likely to pay if the ground is ploughed over and over. The hoe coming after may also make up for deficiencies in ploughing.

Ploughing.

4. The next process, planting, admits of little variety. I find that plants are put at much the same distance apart everywhere. Although, therefore, there are very varieties in the number of days' labour necessary for planting, this is probably owing as much to the want of practice of the planters as to any other cause. Possibly, too, the work is not so well done in one or two of those places where very small numbers are given. I take 10, which is the number given in Makla and Roghunathpore, where the cane is most extensively cultivated, as the normal number, 6 on one side and 16 on the other, being the extreme numbers given. This ought

Planting.

to be affected by the size of the bigha, but on the one hand 16 is given as the number in Boro Boira, which is east of the Saraswati, and 6 in Bamundanga, which is west, so speculation is dangerous.

Hoeing.

5. The next process is hoeing. For this process all figures are given from *nil* in Boro Boira (doubtless a mistake, but this was one of the earliest places where I enquired) to 36 in Romanathpur Hoeing is necessary, whether irrigation is used or not, but it appears to be necessary after each irrigation, and consequently to be made greater where there is irrigation. In Kolachora and Pyragacha, two villages visited the same day, next after Boro Boira, I seem to have made the mistake of entering 6 as the number of days' hoeing. It should have been 6 each time, I think, for five times, making 30 instead of 6. In Makla and Rogunathpore it is the custum to hoe three times, though there is no irrigation there. The disturbing element of irrigation makes it impossible to take any average for this process. In the second Makla account six days only are allowed, viz., 3 twice over. The figure 6 cannot, however, be accepted for Kolachora, as there ar 5 irrigations.

The process of making ridges is given separately, and is connected with irrigation as guiding the water.

Opening out roots, &c.

6. The next process is that which comes just before the rains. It is opening out the roots, putting manure, and earthing up. This is obviously a work that can be done very carefully or in a very slovenly way. It seems to take about 12 days, labour to do this properly. I do not attempt to state an average. The work includes clearing out the withered leaves round the roots. Sometimes fresh earth has been thrown on the young plants shortly before, and then the cost is less Probably also, where there has been much irrigation and consequent hoeing about the plants, the cost may be less. Some people may be more careful than others about removing the dead leaves. Some may clear out the earth more carefully, and put in and cover the manure better.

Binding

7. Then comes breaking and binding the leaves. This is more a normal work, which has its recognized method. Except in that somewhat out-of-the-way place, Romanathpore, the number of day's labour it takes comes to about 25. Some people do it oftener, but the normal number of times the process is gone through seems to be five.

Weeding.

8. Weeding after the rains, the only process left to notice, is not often mentioned. I only came across one place, viz., Ojudhya, where this was mentioned. I have been through many cane fields, but have seen few that are weeded, though many weeds. It is not much needed then. The roots are long and the plants tall and strong. The work of weeding in dry soil would be very heavy.

Summary.

9. To sum up, then, I find that the ordinary cost of cultivating sugarcane, exclusive of processes to be afterwards noticed, is as follows :—

Ploughs	... ...	6
Days' labour	Planting	10
	Opening roots, manuring, and earthing up ...	12
	Breaking and binding leaves	25
		47

Hoeing impossible to take an average for, say, 18 to 30, difference owing to irrigation. The labour will be, in places where irrigation is usual, about 77 days, and where it is not about 65.

Seed cuttings.

10. The next division of the subject, which perhaps ought to be the first in order, but which I take second, as it goes in the cultivation accounts as an extra, not ordinary, charge, is the capital at starting, viz., seed (or rather cuttings) and manure. The cuttings are reckoned in kahans, (a kahan being 1,280 pieces). They are the top parts of the plants, just under the leaves. By a calculation of the number of rows and of cuttings in each some idea of the number of cuttings may be got. This is, roughly speaking, from 3 to 4 kahans, or about 4,000 to 5,500 plants, according to the size of the bigha. Why some people have given only 1¼, 1½, and 2 kahans is a puzzle. I did not like to cross-examine at the time, as such a course would, no doubt, have caused them to change the number without useful result. The number is probably never less than 3 kahans and sometimes as much as 5. I suppose the real explanation is that no one takes the trouble to count the cuttings wanted for a field. They are not usually bought and sold, and if they are, they are probably sold in longer pieces than are planted, and these are cut up afterwards. A charge for cutting up

is actually entered for Pyragacha. The price of a kahan is generally given high when the quantity is small. I therefore take from 3½ to 4 kahans as the usual number of cuttings.

Manure.

11. Manure is oil refuse, cowdung, and tank earth. The first is the only regular manure used. As to this, the more the better. The usual answer I got to questions as to the quantity of this was, "according to means" (*já páré*). It may be taken at 8 maunds. Cowdung is spread occasionally, not regularly. Earth, where available, is spread towards the middle of the hot weather, and is measured by day's labour; the labour may be taken at 8 days; cowdung, from 40 to 80 baskets; value nominal; spread by about 4 men.

Irrigation.

12. Next comes irrigation. As to this, as of manure, it may be said that the means alone limit it. The number of times a crop is irrigated, where it is regularly done, is not less than 8, and goes up to 13 or 14 times. The highest amount of labour given for this is on the Singur Kana Nuddi, where the soil is light and porous. The figures for this region mount up to 80, 90, and 100 days' labour. On the heavier soil by the Saraswati the cost is put at 50 and under, and 60. In Boro Boira at 36. This is a sufficient reason for declining to take any average rate. It is impossible. Irrigation is beneficial to the crop, but a long series of experiments alone can determine in what degree, or what is the most or least that will give maximum profit.

Cutting, crushing, and boiling.

13. Such works as fencing must be looked on as fancy work, useful, but not generally undertaken. The last stage is cutting and crushing. As to this the labour is that of two or three pairs of bullocks relieving one another, and of about 12 men, who take and sometimes exchange duties. The quantity of labour obviously depends on the number of days it takes to crush the cane, and that again depends on the quality of the crop. If the cane is dry, short, and stunted, it will all pass through the mill in a very short time. If it is full of juice, thick, and long, it takes longer. The difference in time is from about 3 to 12 days, possibly even more, the outturn in a day being from 2 to 4 maunds, according to the quality of the cane.

Reasons for classifying expenses.

14. I may shortly state here the reason why I have given a separate account of seed manure, irrigation, and cutting and crushing. It is that there is a custom when

sugarcane land is let in "bhag" the bhagidar gives up half the outturn, but receives from the lessor half the cuttings and manure and half the cost of irrigation and cutting, crushing, and boiling. In reckoning the actual profits of cultivation, therefore, these must be set on one side, and corresponding deductions made from the value of outturn.

Section IV.—*Value of Labour, &c.*

Bullocks at crushing.

As this has already been discussed under the heading Jute, I do not wish to go into the matter again in detail. Labour and ploughs are at the local rates. The labour of a pair of bullocks at crushing is valued at various rates, sometimes with the driver in one, sometimes without the driver. The hire of a pair of bullocks with driver is generally more than that of a plough, probably because the working hours are longer and the work is harder. Seeing that the work is done by four or five ryots combined, and there is no other work for their bullocks at the crushing season, most likely bullocks are seldom hired and consequently when they must be hired the cost is greater. The same will also be true of labourers. I have found it almost invariably the case that the value or cost put upon a day's labour, including everything at crushing is considerably less than the cost calculated in detail.

Crushing mills.

2. The hire of iron crushers varies much, and will probably be reduced by competition, as numbers are being imported yearly. I do not recollect it having been put at less than Re. 1 daily anywhere. In some places it is up to Re. 1-4. As the crushing season is about 40 days, and the first cost of the machine Rs. 70 to Rs. 90, this gives a handsome profit of nearly 50 per cent annually. Some ryots of the more substantial class are buying crushers for themselves. It would be a mere matter of curiosity to calculate the cost of wooden crushers. They are almost entirely driven out of the field. The hire of one is put at eight annas. Oil refuse is valued at all prices from Re. 1 to Re. 1-8. It must vary with the local market. Ditch earth is valued by the cost of labour. On cowdung I may put a nominal value of Re. 1 for 50 baskets, but it is rarely bought and sold.

Bhag tenures.

3. Some guidance to an estimate of the value set on labour may be found in the terms of letting to "bhagidars." These are generally that the bhagidar gets half

the value of manure, cuttings, irrigation, and cutting, crushing, and boiling off. Taking one or two villages as an example, I find the account stands thus:—

Village.	Value of outturn	Value of				Total.
		Cuttings.	Manure.	Irrigation.	Crushing, &c.	
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Ojudhya	63 0 0	5 0 0	7 8 0	16 11 9	30 0 0	59 3 9
Bosipota	36 0 0	4 6 0	4 4 0	.....	17 0 0	25 10 0
Makla	63 0 0	4 8 0	6 0 0	... ..	31 8 0	42 0 0
Monirampur	85 0 0	10 0 0	8 14 0	26 0 0	27 0 0	71 14 0
Roghunathpur	47 0 0	4 6 0	8 8 0	.....	27 0 0	39 14 0

It then appears that the expenses shared equally by lessee and bhagidar amount to within no great distance of the whole income. The balance is then equally divided between them, in compensation to the lessor of 18 months' use of the land and to the "bhagidar" of his labour. The table below exhibits the result:—

Village.	Balance.	Value of Labour and Ploughing.			Share of lessor.	Share of lessee.
		Plough.	Labour.	Total.		
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Ojudhya	3 12 3	4 0 0	21 4 0	25 4 0	1 14 0	1 14 0
Bosipota	10 6 0	4 0 0	17 4 0	21 4 0	5 3 0	5 3 0
Makhla	21 0 0	3 0 0	8 8 0	11 8 0	10 8 0	10 8 0
Monirampur	18 2 0	2 4 0	20 4 0	22 8 0	6 9 0	6 9 0
Roghunathpur	7 2 0	2 0 0	18 0 0	20 0 0	3 9 0	3 9 0

Caution.

Of course the above figures are merely nominal. The labour available to, and used by, the ryot and bhagidar is not generally hired, for there is no such rush for getting work done all at once as there is in the case of paddy and jute. There is not so great an area under cultivation, and great as the labour is, it is spread over all the months in the year for about 16 or 18 months. It is as good for a man to be at work as to be idle in the season when he is waiting for his other crops to ripen, or for the ploughing season. The ryot accordingly generally calculate the labour he can command, and regulates the area he takes up by that. Only in Makhla and Roghunathpore and one or two villages there is the crop really made into a staple, and there apparently the labour becomes more economical, but the outturn also less. The 18 maunds given as the

outturn of a bigha at Makhla is the very highest known. Sometimes it falls to 12; sometimes the crop fails.

4. The analysis of labour and expense on this crop seems to be conclusive evidence of the wisdom of excluding sugarcane from the list of staples. To impose a special rate for sugarcane would be to seriously curtail its cultivation in all places but those where, as in Makhla, the ryots are so heavily in debt that they must cultivate sugarcane in order to have security to offer. Such a rate would also be rather in the nature of a license-tax on industry and capital, for the outturn is owing to these rather than to the quality of the land.

Sugarcane not generally in staple.

Section V.—*Outturn.*

On this I can offer no general conclusion. It will be gathered from the other sections that this varies considerably according to expenses incurred, such as manure, irrigation, labour of tending, &c., and that it affects materially the cost of crushing. Generally speaking, it may be taken that the outturn in weight is about three maunds per day. The price fluctuates with the market, and the market fluctuates considerably. A rate is fixed year by year. This year I believe the rate is from Rs. 3 to Rs. 3-8 So many ryots are under advances and have to sell at less rate or greater weight for the same rate, that little goor is sold at the free market rate. If the market rate (in the village) be taken as the price a ryot gets for his goor, then the market rate of interest on his capital invested should also be deducted from the sum so arrived at. The interest charged seems to be generally about 37 per cent per annum, and on a rough calculation of the various times before realization that it is invested the capital should be charged with about Rs. 20 interest, or the value of about 6 maunds to the bigha.

Uncertain every way.

Price obtained by ryot.

2. The outturn is sometimes sold without being converted into goor, for consumption in the raw state in Calcutta and the towns. The supply thus disposed of is, however, so limited, that to sell his crop for this purpose is a bit of luck for the ryot. The saving in expense is the cost of crushing, &c., or very nearly half the value of outturn in goor. The amount received for a good crop reaches occasionally Rs. 90 per bigha (Burdwan measure)..

Price sold on field.

3. I may state that confusion is apt to arise from the two ways of calculating outturn of goor. The *hari* maund (of four haris) is equal to 1½ maunds in weight. The former method of calculation is fast going out of fashion, but is still used in some places.

CULTIVATION OF POTATOES.

SECTION 1.—*Soil.*

Soil.

The soil for potatoes must be porous and light. They are cultivated on the tora land of the Saraswati river and on the Kana Nuddi offshoot. The latter is the principal area all through Gungadhurpore, Bonkrishtopore, Konragoree, Krishtorampur, Jagonnathbatty, Koomirmorah, and Romanathpur, which seven villages contain 655 bighas of potatoes. A mere fringe of the potato region, however, enters the area under report, the bulk of the cultivation being further north.

Water-supply.

2. Potato land must be near water, as the crop needs free irrigation. There are no classes of this land, the potato land being the best class.

SECTION II.—*Process of Cultivation.*

Seed.

There are two kinds of potatoes, known as "Bombay" and "Country" or "Deshi." Bombay potatoes are probably so called for the same reason that the best mangoes, the best stone for roads are called "Bombay." The seeds cannot be preserved over the rains, but must be imported every year. The great mart for imported seed (probably from up-country) is Baliaghatta.

2. "Country" or "Deshi" seed, again, is grown in the country, and the seeds are preserved over the rains to be planted.

Ploughing and planting.

The land is ploughed up immediately after the rains, the sooner the better, and the seed is planted, if possible, in "Assin," if not in "Kartick." It is sometimes planted even later. Oil refuse is put in with the seed. If the seed is planted early, it must be put in whole, otherwise it will rot. But if late it can be cut up and the pieces planted. Cowdung is sometimes, but not always, spread.

3. The great work after the potatoes are planted is irrigation. This is done as frequently as possible, and the other work connected with the potato is all to facilitate this. Thus the potatoes are planted in the furrows between ridges. As the plant grows it is irrigated The furrows are gradually filled up, the ridges being drawn into them, then the ground between the rows of plants becomes the furrows, and the plants stand on what are now the ridges.

Irrigation.

4. The final operation is lifting. If the plants are in the ground early enough, viz., Assin or the beginning of Kartick, there are two liftings, in Pous and in Magh or Phalgun. The country potatoes are all lifted in Pous, except a very little, which is kept for seed and lifted later on. The Bombay potatoes are lifted twice also, but all are sold. If the crop is planted later, the whole is lifted at once.

Lifting.

5. By lifting early the bulk of outturn is lessened, but the price is higher.

6. The potato crop is better after indigo, and worse after jute; sugarcane is sometimes planted between the rows of the ripe potatoes.

How affected by preceding crops.

Section III.—*Quantity of Labour, &c.*

The quantity of seed is generally about 6 maunds of Bombay potatoes, or from 1½ to 2 maunds of country potato. The latter is smaller than the former.

Seeds.

2. The manure is from 6 to 8 maunds, more or less, and sometimes cowdung in addition, say, 50 baskets. As in other crops, the manure varies according to the means of the cultivator.

Manure

3. Labour of ploughing is given at from 8 to 12 days. More manure seems to imply more ploughing. The ground should be gone over frequently.

Ploughing.

4. The other labour (irrigation, hoeing, lifting, &c,) is given at rates varying from 58 to 103 days. Irrigation varies with the distance of the water from the field. It is done 11 or 12 times, or about once a week. Lifting is much the same, always about 4 or 8 men, according to the crop. A light crop once lifted of course takes less labour.

Irrigation.

Section IV.—*Cost.*

Seed.

Bombay seed is imported to Baliaghatta, and the market varies according to demand and supply. The general rate given is Rs. 6. Country seed is seldom sold, but the cultivator keeps it in stock. When sold, it fetches up to Rs. 32 for the finest, and ordinarily about Rs. 16. Neither big nor little, but a medium size, is liked for seed.

Manure.

2. Manure is valued as for other crops, so are ploughs and labour. The cost of seed and manure is about three times that of plough and labour. A bhagidar gets half seed and manure, and gives half the crop.

Section V.—*Outturn.*

No satisfactory figure can be ascertained.

This is so complicated by the variety of irrigation, the accidents of the year (such as rain after planting, when the seed may rot), the double lifting to suit the market demand (lifting before the full bulk is reached, which is made up for by the extra price gained), that it would be most unsatisfactory to lay down any fixed quantity as outturn for the same land two years running. This, like sugarcane, is a crop more of capital than of labour. The highest value of outturn given is by the Gungadhurpur naib, who says Rs. 120 is got out of a single crop. The same gentleman calculates the cost at about Rs. 48, giving a clear profit of about Rs. 72. As, however, no one is ever said to give more than Rs. 10 as rent and the usual rent does not exceed Rs. 6, the estimate seems a somewhat sanguine one. The probable outturn may be valued at from Rs. 40 to Rs. 80 per standard bigha, and the average cost at about Rs 10 less. The figures are, however, worthless. There is risk of less profit and a chance of greater.

Land might be classed.

2. Potato land is, however, special, and as such, might be classified. Its characteristic quality is that it is light and easily worked, and it must also be near water for irrigation.

Minor Crops.

Minor crops.

These are (for regular cultivation), pan, baigun, potol, dhoncha, and indigo. There are also of course other small crops grown, such as turmeric, onions, squash, carella, &c., but those first named are alone worth noticing.

2. The most interesting crop is pan, whose cultivation is confined to the three adjacent villages of Begumpore, Tajpore, and Adan. It is very largely cultivated in these villages.

Pan.

3. The land is prepared by raising very high, and surrounded with deep ditches or ponds, where the water lies all the year round.

Land.

4. An enclosure is then made of bamboo framework, with a side fence of jute stems, and a loose thatch of jute stems or jungle grass. These keep out light and wind, but let in the dew and air.

Enclosure.

5. The plants are then made of cuttings with a leaf each of old pan plants, and are laid in rows. The rows are about a yard apart, and the plants in each row about four fingers breadth apart. They are planted in the month of Magh (February), and have to be watered daily for the first three months. Then the plants can hold their own.

Planting.

6. The shoots sent up from the roots begin sending out good leaves about the month of Assar (June), and continue to do so for about a year. The stem dies down at the end of a year. In order to secure a continual supply of leaves (the part used) the old stems begin to be cut down about Choyt. The roots then send up fresh stems which begin to give fresh leaves by Assar. The old plants have all been cut down by Assar. The old roots continue sending up fresh shoots yearly for seven or ten years if carefully tended. If not carefully tended the plants may die down in a year or two.

Growth.

7. It is estimated that each bigha of pan needs the constant labour of two skilled men the whole year round. The market wages of such men in Begumpore are Rs. 10 per mensem They have to water and to tie up the plants (to supports of "dhoncha" or of split bamboo), which has to be done every few inches of growth, to pluck the leaves for sale, to hoe and keep clean the ground, and generally to care for the plant. Manure and fresh earth are added freely to enrich the soil. The manure used is castor and mustard oil refuse mixed, or mustard oil. The labour of throwing up earth is distinct, and not done by the gardeners, but by men hired for the purpose, from 15 to 30 days' labour. The larger cultivators only, of course, hire gardeners. The smaller do their own work, but not

Labour.

loss than two men can do this, there is so much irrigation, which needs two men. The flimsy materials employed for the enclosure need renewal year by year, or even oftener. Dhoncha stems, standing as they do by plants in damp soil, rot in six months. Many prefer split bamboo supports.

Outturn.

8. The old leaves are looked on as the best, as they apparently have more flavour and are larger than the young. The leaves are sold by the thousand, and the price varies from an anna to a rupee, according to season, size, and quality.

Disposal of produce.

9. Great quantites are exported from Begumpore for consumption in the towns, in Calcutta and the north. Much goes by rail from Serampore station packed in bundles with wet straw. The bundles weigh about half a maund.

How long plants last.

The plants are in full bearing about three years after being planted. Up to that time they are gradually becoming fruitful, and after a year or two (according to care bestowed) begin to fail and die down. At the end of from seven to ten years they finally die off, and the plantation is abandoned. In the event of a great storm blowing down the enclosure (which happens occasionally) the plantation is often abandoned. It must lie uncultivated for several years before being again used as a pan enclosure

Cost.

11. The first cost of the covered enclosure and of planting and watering the new plants for a bigha of ground is about Rs. 200. The annual cost thereafter of manuring is about Rs. 22-8 and of labour about Rs. 200 or more. Of the first cost about Rs. 130 is recurring and the remainder not recurring. The whole cost is then yearly about Rs. 400. The cost of originally raising the ground is not included in this estimate. Manifestly to estimate the outturn is a very difficult task. It is given at about Rs. 400 yearly at the best stage of the gardens, and less at first and at the end. The margin of profit is therefore not enormous, but for a family of working men might be handsome. There is risk, of course, from storm or from blight, and the loss in such a case is serious.

12. Baiguns are generally cultivated on small garden plots, near the house. The seed is sown in a nursery in the month of Cheyt (March-April). In Boysack the ground is ploughed, and the young seedlings transplanted into it. They are put in rows about a yard apart, the distance from plant to plant being about 2 feet; it takes about 1,600 plants to the bigha. The plants are hoed in Jeyt, Assar, and Sraban

May to July) four men each time. Oil refuse is put to the plants (about 4 maunds to the bigha) in Assar (June). The plants are weeded in Assar, Sraban, and Bhaddar if necessary (June to August). The plants come into bearing in Bhaddar. (August), and continue to bear in some places for three months and in some for six or seven. The fruit is plucked and sold at the market each market day. The produce is about 2 pons (160) per bigha for each market day, *i.e.*, twice a week. For this reason the whole outturn is difficult to estimate. This year the crop in some villages failed months before the usual time. In some it is still going on (middle of February). Baiguns are used as a change crop for sugarcane, and, as I said above, are cultivated at leisure hours near the house in little patches. Manure, hoeing, and irrigation are the chief items of expense.

Potol.

13. *Potol* grows best on new soil, and therefore is cultivated chiefly on land like the spill bank of the Dankoona Canal, where the soil is constantly renewed, on old brick kilns, where the burnt soil has been rendered porous and the ground has been uncultivated for many years, and on newly cleared soil. Potol is planted in Kartick (November), being propagated by roots. These are brought from villages in the south, and about 25 or 30 seers, value four rupees, are needed. The principal labour is hoeing and weeding. The plant comes into bearing about the month of Cheyt, and goes on bearing till the rains Like baigun, its fruit is plucked on market days, and sold twice a week. It is sold by the seer. The plant dies as soon as the rains begin. The outturn at the beginning is 5 or 6 seers once a week, at about 8 pice a seer. It rises to 1, 1½, and 2 maunds, at Re. 1 or Re. 1-4 per maund. The outturn is difficult to estimate, say, about Rs. 20 or Rs. 25 in value. Potol is a favourite ingredient in curry.

Dhoncha.

14. "Dhoncha" is sown merely to occupy the ground after sugarcane. The only cultivation is ploughing, sowing, cutting, and tying into bundles. It is sown in the hot weather and cut at the end of the rains. It is chiefly used for supporting pan plants, and what is not sold for this is used as fuel. The only places where it is generally cultivated are Makhla and Roghunathpur, where sugarcane is an incessant crop, and no change crop is available. Jute would be preferred, but exhausts the soil. Dhoncha is sold by the cultivators in bundles, Rs. 3 or Rs. 4 for 100. That is about the outturn of a bigha. The pan cultivators buy it in

kahans. Sometimes the dhoncha comes up badly; sometimes it is not sold, the demand being limited. The value of the article, too, is limited by the split bamboo rods, which are also used, and would be used more if the "dhoncha" were not cheap. Dhoncha grows not unlike jute in appearance. It is used as a supporter of pan plants in preference to jute stems which have not consistency. I have seen in Dr. Hunter's Gazetteer that the fibre of dhoncha is used for making ropes. If this was ever so, the practice has gone out here altogether.

Indigo.

15. Indigo is cultivated in only a very few villages, in connection with a small indigo factory at Chichrund, the property of Baboo Chunder Kanto Mookerjee, of Jonai. The advance is Rs. 3 per bigha, out of which are deducted four annas "hishabana," two annas price of paper and six annas price of seed. The outturn is about 50 bundles, at 8 or 10 per rupee. The ryots cut and the factory men bind and carry away. The cost of cultivation is comparatively small. The indigo crop is a very good preparation for a potato crop afterwards, but the difference does not make up for the loss of indigo as compared with jute, and it is not accordingly popular.

On the ryots expenses, and what chiefly affects them.

Reasons for giving this sketch.

This can only be a very slight and a general account. For the present purpose it would be out of place to give minute description of the ryots ways of life. As one cannot help having a tendency, however, to look upon the ryot's time as wholly available for cultivation, and his means as all available for his living, it will be well to recall to memory one or two of the chief claims on his time and his money. If I do not attempt an elaborate account of all these, it is partly because I do not know enough about them, and partly because a ryot is not a machine and all do not act alike.

Classification of expenses.

2. His expenses may be roughly divided into (1) cost of living, (2) cost of cultivation, and (3) other expenses. It is not easy to reckon up even the most prominent of these items correctly, because, like the English farmer, the Bengalee ryot often forgets to take into accounts anything he has not to pay for. Thus he is careful to value oil refuse he buys for manure, but not the cowdung he has stored for the same purpose; that he only

reckons like tank mud by the number of days' labour necessary to carry out to the field and spread.

3. The cost of food accounts for nearly all the rice crop. Little paddy is sold; the main part of the crop, except in villages with great rice field and nothing else, being kept for home consumption. The particulars of food and clothing it is not necessary to enter into. I wish to draw attention to items rather than amounts.

Shelter.

4. Another item, the cost of living, next in importance to food is shelter. The accounts for a large share of another part of rice produce, viz., straw. In every Bengalee homestead there are about four houses or sheds, and these have to be thatched. An ordinary thatch takes the produce of nearly 3 bighas of land—good straw. It lasts about 4 years. Therefore the ryot has to lay aside about that quantity every year for thatching his houses. Sometimes a thatch has to last longer, but it is then leaky and bad. Sometimes jute stems, sugarcane leaves, jungle grasses, and other substitutes are used, but only when straw cannot be used. The best substitute is jungle grass (bena), but that is seldom available. Besides straw, the ryot has to provide split bamboo and string, and to engage labourers (it is a work of skill) to thatch and trim the roof. This, besides the straw, comes to about Rs. 7-8, which the ryot ought to be able to lay aside yearly for the purpose. Such a sum, of course, would not cover the cost of erecting a new house, which, however, has very seldom to be done, or of thoroughly repairing the roof. These operations would cost about Rs. 70 or Rs. 10 in addition respectively.

Family charges.

5. The last considerable item in the cost of living is the maintenance of helpless relatives, whether old or young, and the care of his own health and theirs. Milk must be got for the children, and medicines in times of sickness. The kobiraj or doctor has to be paid. In the cost of living, too, may be included the observances of religion and society. The ryot has, besides paying taxes, to have poojahs and give a fee to his priest; to

Expenses due to society.

dispense charity to beggars; to take his turn in feasting his neighbours; to have rejoicings at weddings, births, or weanings; to hold the sraddhs of his ancestors, to marry his children at the proper age and not be stingy of expense; to pay the barber his fee, and all other such little tributes to society. It is all very well to say that these are luxuries and not necessaries.

That may be, but still they are the sort of luxuries no villager dare do without. Society would not stand it. I do not here include that too frequent source of expense, the black sheep. If one of the family takes to gambling, drinking, or other vices, these certainly are luxuries that he could do without, and that bring loss on his friends.

6. The cost of cultivation is in seed, labour, machinery, cattle, and manure. It is too often forgotten that the ryot is not a machine. In calculating the cost to him of labour, the chance of his falling sick has always to be taken into account. If he falls sick at a critical period, say, seed time or harvest, he must hire labour, and that is always a loss. The cost of machinery is not generally a great one. Such a machine as a sugar-mill, however, comes to a good deal. If he cannot buy his machinery he must hire or borrow to buy, either course involving loss. Unless he has capital for these purposes he is put to much expense. Seed is another very considerable item, *e.g.*, in the potato cultivation, where the seed for a single bigha costs up to Rs. 40. Manure is treated under the various heads of cultivation. Obviously, however, the means for buying the manure must be available long before the crop is ready.

Labour.

Machinery.

Seed and manure.

7. Cattle, above all, are necessary items to be considered. They must be purchased, and if they die (as in the case of the serious outbreak of rinderpest in this district this year) they must be replaced at some expense. They must be fed, and well fed, or they will become weakly, apt to catch disease and unfit for work. They will be worked to death if need be in the season. If any one condemn the cruelty of a cultivator overworking his bullocks let him imagine the consequences to the ryot of not getting the fields ploughed in the season, or, say, what he himself would do on arriving at a railway station five miles from home, and finding a single hackney carriage with a galled pony. To feed the cattle properly they should be turned out to graze in off seasons, and must, when working, get straw or grass to eat, with oil cake, or other strengthening diet, and salt. Rich men's cattle can go in gardens, but poor men's cattle have been deprived of their old common grazing grounds. These have been appropriated and rented out to cultivators by the zemindars. The ryot turns his cattle into the paddy fields in the cold weather, but they pick a very scanty living up there. I only note here

Cattle.

Cattle's maintenance.

Grazing.

that the shutting up of the grazing grounds increases the expense of the ryot, because he has to keep more food for the bullocks; because the want of freedom weakens the cattle, and makes them less fit for work; and because they are more likely to fall victims to disease, and he will then have to buy new cattle.

8. The other expense referred to in paragraph 2 of this section are what may be called contingent expenses. They come very often of events which he cannot control. Such are failure of harvest, law suits, and other sources of great expense (I do not here include rent, which is the subject under discussion) and taxes. It has been already shown how much it is in the landlord's power to increase these expenses by means of harassing rent suits, stirring up bad blood among the neighbours, and other less plausible devices There are some specimens of the way in which this can be done in the history of several of the villages in the area under report.

Failure of crops, law suits, &c.

9. Without going into details any further, I may here explain the object of the above rough sketch, which was to show that the ryot's problem of finance is no less complicated than that of greater and wealthier men, although he may have to think in pice and rupees instead of hundreds and thousands. No doubt this is known; but I often think it cannot always be realized. The ryot is the head of a family, with helpless dependents to provide for, work to get done, and an establishment to manage. It is easy to laugh at him chaffering all day long for a pice or two more or less, and calculating whether he can buy a few yards of longcloth or another brass pot. But why does the absurdity not strike one when this ryot is supposed to contend on equal terms with his zemindar in the law courts? Can it not be seen how such a struggle must disorganize his whole system of life?

Ryot's finances complicated, if microscopic.

10. I do not wish to go again over the ground already traversed. To conduct a case, or a series of cases, the ryot has to devote his whole energies, time, money, and credit to the task. He sells all the grain in store, his wife's ornaments, his lotas and brass vessels, cattle, and all that he has; borrows money at high interest, mortgages his holding, and in fact gives up all that he has to the defence of his rights. His resources are limited. His opponent knows very well what he can do, and, if prepared to spend the money, can depend on soon wearing him out. It is only a question of money. Law suits dry up the ryot immediately.

Effect of rent suits.

There is no money to buy manure, to hire labour. The cattle must get less food, the family give up as much of the household property as can be spared for the pawnshop. Above all, there is no hope. It is as well to give in at first as at last, and so the ryot gives in. He can calculate, and so can his opponent, that after a time he will have nothing left to sell; the money lender will refuse further credit. However great his right, he will have to give up then. Why not give up now before all is gone?

Remedy.

11. The above is no fancy sketch, but is only what has occurred and is occurring. The only remedy that I can see is a check on the zemindar's power to drag the ryot into courts, and the power which the Government, for it own reputation, should take of entering as a party to prevent miscarriage of justice. No one could then count beforehand on the result of contest as to be determined by force. Litigation would no more be a mere engineering question. The weak might hope and the strong fear, and both would be enabled or compelled to depend more than either does now on the justice of the cause. Bad cases would be given up, and good ones persevered in much more than at present. Now the mischief is that the loser may often gain his end though he lose the suit, for his end is to exhaust his opponent. If it be considered how delicately balanced a ryot's finances often are; how considerable to him the cost of a suit is, and yet how insignificant to his opponent; what an inroad on his time the conduct of the case must make; above all, how many men take to heart the consequence to him of entering into a contest, which generally is ruin, it must be evident that there can be no failure of justice so complete as that which, leaving him alone, is likely to cause. I urge, therefore, that the power of dragging a ryot into court should not be treated as a mere routine matter, but should be carefully limited by safeguards. If exercised, should be looked upon as of sufficient importance to attract the attention of Government. The Government should also be able, if it think the power is abused, to interfere and prevent such abuse, which has already ruined many ryots. If this is not made possible (perhaps even if it is) what a zemindar said to me is likely to come true, "Whatever laws are made the zemindars will be able to get from the ryots what they choose. The ryots have no chance or choice."

Restrictions on law suit necessary and not unfair.

12. It may be thought that such a course as blocking the way into court would be very dangerous, interfering with the liberty of the subject. It would

certainly be interfering with the liberty of one subject to ruin many. No doubt it is flattering to the Government to have its courts and processes resorted to freely ; but does Government feel flattered at the sort of people that resort to its courts most freely, and at their objects in so doing ? It is said of a zemindar that he is very good ; he has never had any rent-suits. Every respectable man who can say it, is proud of never having been in court or given evidence. Between equals our courts are very well, but between unequals they fail to do justice. The zemindars of Eastern Bengal complain of them there and the ryots in this part of the country. It is force, not right that wins. Each question as it comes before the court is, no doubt, decided fairly so far as it is put before the court. But the chief question of all, how long the weaker party can hold on, is not argued. In the present state of the law, if he triumphs his opponent can say to him : "I'll have you back to-morrow ; you have pawned your wife's ornaments for the cost of this case, you shall sell your dishes for the next. I will bring you back twenty times if necessary." Liberty to do such things is not needed by good zemindars and should not be given to bad.

Real issue is never argued in court.

13. The question of the health of the ryot and of his cattle is nearly as important as the actual rent to be paid. For bad health means less work and more expense, making a double strain on his small resources. I do not mean to go into the whole question, but content myself with one factor in his health and that of his cattle, which is probably the most important, viz., roads and open spaces. It is notorious that grazing grounds used to exist in every village, and now there are none. What has become of them ? They have been cut off and settled for cultivation with individual ryots, and are no longer available for common use. The cattle cannot run about anywhere. They are in some places not allowed on the fields even in the cold weather. When let out, they must be tethered on some barren patch with a blade or two of grass here and there. They have generally, when not engaged in work, to stand in the homestead, tied by the neck, in pools of their own urine or of water splashed out of their feeding troughs. To keep them in health the ryot must provide food all the year round instead of only in the working season. The confinement to an artificial life weakens them, and they cannot do so much work. They also catch disease if it is going. Many ryots now hire cattle

Health.

Roads and open spaces. Effect of shutting up grazing grounds.

rather than keep them, paying a high rate. A man told me the weakness of the cattle is one reason why the iron sugar-mill is preferred to the wooden one. The bullocks used to come to a standstill every now and then, having no strength to drag.

Roads going to ruin.

14. The roads again are, as was mentioned above, the chief ventilators of the villages. They were in old times, everyone says much wider than now. In some villages, where there has been an old established zemindar, they are still wide. But, as men complain on every side, they are being encroached off the face of the earth. I do not say the zemindars have done this, but they have not prevented it, and unfortunately the task of preventing it has been left to them. The term public road has been applied exclusivaly to roads maintained at the expense of the State, and those roads in villages which correspond to the streets of municipalities (which were themselves, until within a few years back, only village roads) have been left to themselves. All who have to do with municipalities know the dangers to which such roads are subject, even when carefully protected; from erosion by tanks, from encroachment by jungle, from cutting by drainage, from the gradual pushing forward over them of fences, and sometimes from actual blocking and bodily appropriation. It is not difficult then to understand what becomes of them if left to protect themselves. They dwindle to a narrow path through thick jungle, and then some one bodily appropriates the whole road.

"Ails" or boundary ridges.

15. Similarly the "ails" or boundary ridges of fields used to be wide and suitable for the ryot's walking along to his fields, and very useful for grazing cattle on. They are now little mud threads. High rents and measurement have done this. No ryot can afford to leave so much land uncultivated. He cuts in on one side, and his neighbour has to resist or cut in on the other. I have seen cases where a man encroached on an ail and the ryot holding the field on the other side objected. But things like this are very difficult to check, for the mischief is done by inches. A slice this year and a slice the next, and on the side next the man's own field.

Zemindar's course of action.

16. In all these matters it is the interest (possibly not real, but immediate) of the zemindar to let the mischief go on. If a man cultivates part of a grazing ground rent is demanded. If he appropriates part of a road, this is assessed. If he encroaches on the ail he cultivates all the more, and it is included in

his jote. He will be all the more content to pay high rates. The zemindar does not usually live in the village. Want of roads or grazing grounds there does not put him to personal inconvenience. He may be as good a man as John Gilpin, but with him, too, "loss of pence" is the main consideration.

Remedy.

17. For these reasons chiefly I have urged that rates should depend, not merely on cost of cultivation or on outturn, but on the circumstances of each village. I have not here touched on the question of roads outside villages, as

District roads.

these affect the local value of the outturn. They may make a difference between hardship and easy circumstances. As Sub-divisional officer of Serampore I have been much impressed by the inadequacy of existing provision for roads, and have repeatedly urged a change of system. My efforts have not so far been successful. I need not go over the ground here again, but will only remark that not less than a lakh of rupees is lost yearly by the roads being bad instead of good. The matter grows more serious yearly; there is universal discontent even in places most favoured with roads, and hundreds of square miles pay a road cess without getting any substantial return. Much of this is to be attributed to the system in force, which is well enough adapted for backward districts, but not at all for this.

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General remarks as to experiments in testing weights and outturn of paddy.

I used throughout a tape measure and occasionally a chain sent me for the purpose.

2. In one or two cases, where I was unable to find specimens of rice uncut, I measured a field where the paddy lay cut but not removed, and counting the bundles, calculating the number of average bundles that would correspond with a given area.

3. Where I cut, my procedure was to measure off carefully by the tape the area for enquiry, fixing four iron pins, one at each corner. Round these pins was stretched a piece of red tape enclosing the space. The rice was then cleared away, all the paddy whose roots were inside the tape being kept, and the rest drawn outside. The paddy was then reaped, bound and carried to a threshing floor.

4. It was sometimes threshed by the field on a mat, sometimes on the road, and sometimes in the homestead of neighbouring ryots. The rice was cut, bound, carried, and threshed by people of the place without remuneration.

5. The scales used were at first got from neighbouring shops, the weight being properly stamped weights. I afterwards got scales and weights of my own. The weights I tested by standard weights purchased by me, and found them correct The weighing was carefully done. The weights were of 80 tolahs to the seer, or each seer 2lb. weight. Maunds I calculated at 40 such seers. The bigha is the standard bigha of 14,400 square feet. Where the larger bigha is in use I translated the calculations from the smaller to the larger by adding one-fourth. They appear in the general tables which I furnish.

6. I invariably saw each process carried out myself. I regret that I cannot fill up the columns for rice-husking. A separate series of experiments in this have been made.

7. Prices I did not obtain in the method set forth in the headings of the table furnished, and cannot therefore now fill it up in the manner directed. I ascertained the prices at which the ryot was likely to be able to sell his paddy at the time he usually sells. This is either at harvest time or in the rains when there is little doing. Nearly the whole supply is used up locally. There is no export, but rather import. The dealings in local paddy are small. Prices given are for unhusked paddy and not for rice.

R. CARSTAIRS,

Covenanted Deputy Collector, on special duty.

I.—*Village Statistics.*

	Jonai.	Pyragacha.	Benipur.	Kolachora.	Chunditolla.	Bamundanga.	Borizhatty.	Ajoodhya.	Gorulgacha.	Makhalpara.	Krishtopore.	Khanpur.	Eklokee.
Towjee area in acres	883¼	431½	108	694½	289¼	352½	297½	410¼	250½	239	435½	262½	249½
Jamabandi area in bighas	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	654¼	.....	473½
Jama-wasil-bakee area in bighas ...	.....	647	172	823	450½	305½	170	338⅔	.....	289½	851	217	505⅔
Homestead land in bighas	550	130	21	77	85	40	189	65	25	.....	200	40	100
Inhabited houses...	513	139	30	153	145	81	340	99	148	.....	195	146	54
Pucka huts...	726	51	.....	129	97	12	242	3	304	.....	119	7	.....
Kutcha huts	1,511	450	142	434	569	282	739	255	628	.....	673	386	254
Total huts	2,237	501	142	593	666	294	981	258	930	.....	792	393	254
Population, last census...	3,303	635	173	720	680	440	1,587	500	865	.....	1,035	782	367
Mostly	Hindoos.	Hindoos.	Only Hindoos.	Hindoos.	Only Hindoos.	Only Hindoos.	Hindoos.	Only Hindoos.	Hindoos.	.....	Hindoos.	Hindoos.	Hindoos.
Percentage...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cattle, cows	250	108	28	93	110	63	161	70	108	.....	79	63	21
,, calves	278	96	31	80	125	48	169	74	113	.....	104	99	46
,, bulls	33	22	6	17	14	25	60	5	54	.....	5	16	3
,, bullocks	144	66	29	64	64	72	6	76	16	.....	101	91	31
Total cattle	705	292	94	254	313	208	396	225	291	.....	289	269	101
Area of bamboo and garden	.....	.....	.....	.....	.....	.....	.....	.....	... ...	... ...	115½	.....	36¼
,, of tank and pond	200	40	20	95	50	40	30	78	10	43	50	.....	50
,, of danga and soona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	326	.....	133
,, of sali	... ...	.....	.....	.....	.....	.....	.....	.....	... ...	.....	172½	.....	290
Crops, paddy	800	100	141	500	130	223	100	180	200	610	463	200	375
,, jute and kolai	126	120	30	125	125	50	40	125	100	5	150	75	60
,, sugarcane	10	50	8	66	50	16	58	50	10	25	50	50	24
,, potato	12	30 (Aus.)	.....	4 (Aus.)	4	3 (Aus.)	.....	.....	5	.....	20	.....	.....
,, other	.....	20	.....	15	.....	2	.....	.....	.....	.....	.....	.....	.....
	M. K.	M.	M.	Mds.	M. P.	M.	M. K.	M. P.	M. P.	M. P.	M. K.	M. P.	M. K.
Highest outturn, paddy land in maunds of paddy and kahans of straw.	8 + 1	8 +	2¼	8	7½ + 10	7½	7½ + 1	5 + 10	6½ + 12	7 + 12	9½ + 1	6½ + 8	8 + 1
Value of outturn in rupees	10	7	2½	7	7-11	5-11½	10-10	5-9	8-2	8-8	10-10	5-14	9-8
High land in rate area	.....	.....	IV	IV	IV	.....	IV	IV	IV	IV	IV	IV	IV
Low land in rate area	III	III	.....	III	III	III	III	III	III	III	... ...	III	III
Local length of cubit	20″	20″	20″	20″	20″	20″	20″	20″	20″	20″	20″	20″	20″

I.—*Village Statistics*—continued.

	Gungadhurpur and Bonkrishtopur.	Monirampur with Hariadoho.	Gona.	Krishtorampur.	Jagonnathbatty.	Koomirmorah.	Romanathpur.	Gokoolpur.	Madhubpore.	Baksha.	Duttpur.	Jonardanpur.	Khoragoree.
Towjee area in acres	640½	448½	90¾	1,295¾	148½	1,005	1,105	515	367¾	729	185	148½	174¾
Jamabandi area in local bighas	1,454	.....	.....	.....	.....	1,806	.....	.....	.....	.....	247¼	265	.....
								Only from Joy K. Baboo.					
Jama-wasil-bakee area in local bighas.	996	1,607½	.....	.....	337	2,415½	1,633½	148¾	828¼	847	324½	323	.....
Homestead land in local bighas	59	54	.....	325	54	250	135	15	350	140	13	26	50
Inhabited houses	269	141	.....	283	111	491	230	25	135	351	36	21	72
Pucka huts...	23	10	.....	21	1	39	.....	.....	3	474	3	.....	17
Kutcha huts	894	669	.....	1,448	265	1,672	.....	.....	543	1,105	145	126	297
Total huts	917	679	.....	1,469	266	1,711	.....	.....	546	1,579	148	126	314
Population, last census... ...	1,342	1,270	.....	2,205	529	2,744	1,579	167	665	1,747	194	118	383
Mostly	Hindoos.	Hindoos.		Hindoos.	½ Hindoos, ½ Mahomedans.	½ Hindoos, ½ Mahomedans.	Hindoos,	Only Hindoos.	Hindoos.	Hindoos.	Only Hindoos.	Only Hindoos.	Hindoos.
Percentage	87	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cattle, cows	158	97	.....	200	48	188	.....	.....	141	183	58	28	56
,, calves	217	116	.....	295	47	241	.....	.....	207	183	85	28	74
,, bulls	80	38	.....	90	12	29	.....	.....	16	39	21	11	20
,, bullocks	223	55	.....	248	57	216	.....	.....	137	121	41	13	41
Total cattle	678	306	.....	833	164	674	.....	.....	501	526	205	80	191
Area of bamboo and garden ...	158	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	12½	.....
,, of tank and pond ...	76	29	.....	115	20	100	40	8	.....	200	5	20	20
,, of danga and soona ...	902	.....	.....	.....	.....	.....	.....	.....	.....	.....	97¼	72¾	.....
,, of sali	250¾	.....	.....	.....	.....	.....	.....	.....	.....	.....	137	149¼	.....
Crops, paddy	254	590	225	2,110	217	2,614	2,016	1,160	125	900	220	280	20
,, jute and kolai	454	825	.....	250	25	50	70	23	100	200	135	93	160
,, sugarcane...	119	77	.....	25	.....	.....	40	.....	15	40	16	5	.....
,, potato	140	120	.....	325	25	50	35	.....	40	30	16	9	.....
	(Aus paddy).	(Indigo).		(Indigo).							(Indigo).	(Indigo).	
,, other	171	65	.....	5	.....	.....	.....	.....	.....	.....	9	4	.....
	M. K.			M. K.		M.	M. K.	M. K. P.	M. K.	M. K.	M. K. P.	M. K. P.	M. K.
Highest outturn, paddy land in maunds of paddy and kahans of straw.	11½ + 1	.....	.....	9½ + 1	.....	9⅜	5½ + 1	5⅜ + 0 14	6½ + 1	8¼ + 1	7 0 12	7⅞ + 1 0	8½ + 1
Value of outturn in rupees ...	16	11-8	.....	11-8	.....	9-6	7	7	10-7	11-3	10-10	10-12	11-13
High land in rate area	II	II & IV	.....	II	II	II	II	II	IV	IV	IV	.....	IV
Low land in rate area	I	III	I	I & III	I	I	I	I & II	III	III	III	III	III
Local length of cubit	20″	20″	20″	20″	20″	20″	20″	20″	20″	20″	20″	20″	20″

I.—*Village Statistics*—continued.

	Osmanpur.	Monberh.	Koosigachee.	Raghunathpur.	Chundigurh.	Kansipur.	Bohira.	Khord Bohira.	Banshye.	Bosipota.	Makhla.	Okordoha.
Towjee area in acres	.....	433½	274½	131½	25½	405½	405	230	666½	133½	668	234
Jamabaudi area in local bighas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jama-wasil-bakee area in local bighas.	Bighas. 270½	Area not given in all the papers.	Area not given.	Papers not received.	Area not given.	Area not given.	Area not given.	Area not given in all the papers.	For 9 ans. shareholder 490 bighas.	Area not given.	Bighas. 1,682½	Papers return.
Homestead land in local bighas	.....	100	.....	125	41	50	25	250	250	15	250	30
Inhabited houses	.....	177	.....	167	32	121	89	.. ...	225	10	266	78
Pucka huts	.....	43	.....	.....	5	14	1	.....	21	.....	.....	8
Kutcha huts	.....	580	.....	.....	26	86	78	.....	206	28	.....	241
Total huts	.....	623	.....	.....	31	100	79	.....	227	28	.....	249
Population, last census	.....	820	.....	1,086	98	392	297	.....	721	623	1,562	350
Mostly	.....	Hindoos.	.....	Only Hindoos.	Only Hindoos.	Only Hindoos.	Only Hindoos.	.....	Hindoos.	Hindoos.	Only Hindoos.	Only Hindoos.
Percentage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cattle, cows	.....	95	.....	.....	9	18	62	.....	105	16	.....	50
„ calves	.....	140	.....	.....	11	114	74	.....	76	13	.....	72
„ bulls	.....	7	.....	.....	1	10	16	.....	20	11	.....	18
„ bullocks	.....	69	.....	.....	8	79	78	.....	138	9	.....	53
Total cattle	.....	311	.....	.....	29	291	230	.....	339	49	.....	193
Area of bamboo and garden	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
„ of tank and pond	12	.....	2	15	4	50	10	25	100	1	100	25
„ of danga and soona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
„ of sali	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Crops, paddy	483	637	508	358	.....	600	135	120	1,005	149	500	.....
„ jute and kolai	.....	58	50	60	.....	80	140	30	50	45	100	85
„ sugarcane	.....	20	180	250	.....	.....	10	5	20	85	600	9
„ potato	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
„ other	.....	Baigun. 10	.....	Baigun. 10	(Aus). 4	(Aus). 60	(Aus). 50	.....	.....	.....	.....	.....
Highest outturn, paddy land in maunds of paddy and kahans or pons of straw.	.....	M. P. 5¼ + 18	M. K. 5 + 1	.....	.....	M. K. 2½ + 1	M. K. 3½ + 1	.....	M. K. 4 + 1	M. K. 5½ + 1	M. K. 4½ + 1	.....
Value of outturn in rupees	.....	9-2	7-11	.....	.....	4-12	6-8	.....	6-8	7-5	7-12	.....
High land in rate area	.....	IV	VI	VI	VI	VI	VI	VI	VI	VI	VI	.....
Low land in rate area	.....	V	VII	VII	.....	VII	VII	VII	VII	VII	VII	.....
Local length of cubit	20″	18″	18″	18″	18″	18″	18″	18″	18″	18″	18″	18″

I.—*Village Statistics*—concluded.

	Modhubatty.	Khorial	Tajpur.	Khurserai.	Begumpur.	Adan.	Bankagacha.	Chickmundo.	Naiti.	Bealadanga.	Booits.	Monohurpur.	Kalipore.	Mirgola.	Kristochuck.
Towjee area in acres	157½	.....	288½	273	520½	268	118½	.....	.....	.....	.....	513½	27½	986	63
Jamabandi area in local bighas	.....	.....	.....	Bighas. 776	.....	(206½)		.....	.....	.....	.....	.....	Bighas. 59½	Bighas.	Bighas. .....
Jama-wasil-bakee area in local bighas.	Not received.	Area not given.	781½	.....	.....	(427)		.....	.....	.....	.....	.....	62½	.....	184½
Homestead land in local bighas	33	45	94	101	600	32	29	.....	.....	.....	.....	60	45	175	25
Inhabited houses...	491	... ...	281	337	464	132	34	.....	.....	.....	.....	199	32	126	23
Pucka huts	6	.....	117	181	397	22	22	5	.....	5	.....	13	.....	14	.....
Kutcha huts	165	... ...	837	787	1,082	428	162	85	.....	278	.....	589	76	844	.....
Total huts	171	.....	954	968	1,479	450	184	90	.....	283	.....	602	76	858	.....
Population, last census... ...	141	533	1,330	1,735	2,547	729	178	458	1,369	431	155	883	106	640	173
Mostly	Hindoos.	Hindoos.	Hindoos.	Hindoos.	Hindoos.	Hindoos.	Only Hindoos.	Hindoos.	Hindoos.	Hindoos.	Hindoos.	Hindoos.	Hindoos.	Mahomedans.	Mahomedans.
Percentage...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cattle, cows	39	.....	97	118	234	106	45	83	.....	102	.....	74	8	61	.....
,, calves	47	.....	75	102	187	83	45	90	.....	119	.....	190	15	127	.....
,, bulls	24	.....	7	38	43	26	2	13	.....	8	.....	2	1	201	.....
,, bullocks	28	.....	109	52	43	34	36	89	.....	99	.....	130	7	8	.....
Total cattle	138	.....	288	310	507	249	128	275	.....	328	.....	396	31	397	.....
Area of bamboo and garden ...	.....	.....	.....	.....	.....	(47½)		.....	.....	.....	.....	.....	5	.....	.....
,, of tank and pond ...	10	6	102	112	130	22	15	60	61	20	8	25	10	100	.....
,, of danga and soona ...	.....	.....	.....	.....	.....	(122)		.....	.....	.....	.....	.....	32½	.....	.....
,, of sali	.....	.....	.....	.....	.....	(11)		.....	... ...	.....	.....	.....	9½	.....	... ...
Crops, paddy	125	400	350	76	145	43	60	173	300	217	55	775	.....	1,880	74
,, jute and kolai	60	60	30	57	10	365	68	150	150	40	55	90	20	125	15
,, sugarcane	20	10	.....	57	30	5	.....	25	100	5	10	10	.....	25	2
,, potato	30	.....	50	57	20	72	19	10	50	25	8	.....	.....	... ...	15
,, other	.....	.....	.....	(Aus). 57	.....	(Indigo). 12	(Indigo). 8	.....	.....	.....	.....	.....	.....	(Aus). 20	(Indigo). 2
Highest outturn, paddy land in maunds of paddy and kahans or pons of straw.	.....	W. K. 6¾+1	M. K. 8¾ + 1	M. K. 7 1	M. P. 4⅝ + 12	M. K. 5 + 1	.....	.....	.....	.....	.....	.....	.....	M. K. 4 + 18	M. 8½
Value of outturn in rupees ...	.....	9-12	12-12	11	6 14	7-6	.....	.....	.....	.....	.....	.....	.....	7-6	7-10
High land in rate area	.....	VI	IV	IV	IV	IV	IV	IV	VI	IV	IV	VI	IV	IV	IV
Low land in rate area	.....	VII	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	V	.....
Local length of cubit	20″	18″	18″	18″	18″	18″	18″	18″	18″	18″	18″	18″	18″	18″	20″

V.—Villages east of Saraswati.

Number.	Village.	Bastu.	Udbastu.	Tank, &c.	Garden.	Bamboo.	Betel leaves or pan	Sugarcane.	Potato.	Hamontuk paddy.	Aus.	Jute and kolai.	Indigo.	River.	Khal.	Road.	Bhagar.	Jungle.	Bhil.	Polit.	Haut and bazar.	Total.
1	Okhardaha	20	10	25	100	15	...	9	5	..	..	85	..	...	...	1	30	...	...	...	... ..	300
2	Kharserai	53	48	112	164	61	...	57	57	76	57	57	...	45	..	15	...	...	...	6	.. ...	808
3	Tajpur	70	24	102	250	.	55	.....	50	350	..	30	...	.	..	19	...		...	...	.....	950
4	Begumpur	(600)		130	500	..	180	30	20	145	...	10	...	. .	...	25	.		...		.....	1,640
5	Adan	22	10	22	44	46	20	5	72	43	..	365	12	40	. .	6	. .	...	...	10	.....	717
6	Bankasacha	20	9	15	10	45	5	.....	19	60	...	68	8	...	...	8	...	...	...	8	.....	275
7	Kalipur	35	10	10	8	..	...	.. ..	.....		...	20	..	..	...	5	...	...	...	...	. . .	88
8	Monohurpur ...	30	30	25	40	.	...	10	. ....	775	..	90	..	..	...	...	...	...	...	...	.....	1,000
9	Mircola	75	100	100	200	...	...	25	... ..	1,880	20	125	.	...	...	50	...	...	..	.	.....	2,575
10	Monberh	80	40	40	80	10	...	20 & dhoncha	10 bagun	637	.	58 Aus, kolai, and potol.	..	...	...	...	..	.	..	20	.. ...	995
11	Roghoonathpur ...	100	50	15	30	5	...	250	10	358	...	60		...	50	10	...	...	...	2	.....	940
12	Kusaigachi		...	2	10	...		180 & dhoncha.	.....	508	.	50 Aus, kolai, and potol.	...	...	50	...	...		.	...	. . .	800
13	Makhla	150	100	100	150	100	..	600	. . ..	500	...	100	...	...	50	50	...	..	...	20	... ..	1,920
14	Bosmota	5	8	1	2	1	...	85	.....	149	...	45	..	...	1	...	...	...	...	3	... ..	300
15	Khorial	25	20	6	13	60	.	10	.....	400	...	60	..	...	...	5	...	..	...	1	..	600
16	Chandigarh	11	30	4	20	10	...	.....	.....	..	4	... .	...	..	...	.	...	...	...	1	..	80
17	Banshye	150	100	100	75	150	...	20	... ..	1,005	...	50	...	...	..	20	...	...	...	30	... ..	1,700
18	Kanaipur	20	30	50	40	50	...	.....	... .	600	60	80	..	...	...	20	...	...	...	50	.....	1,000
19	Bohirah	25	20	60	50	100	...	10	.....	1.5	50	140 Aus, jute, and kolai.	...	...	...	10	...	..	...	300	.....	900
20	Khord Bohirah ...	100	150	25	180	...	..	5	.....	120	...	30	..	...	...	8	...	...	...	2	Railway 12	632
21	Tissa	40	20	30	100	20	...	25	20	90	.	100	..	.		5	...	...	...	50	.....	500
22	Chikrand	80	50	60	12	25	...	25	10	173	..	150	..	..	...	...	.	...	...	15	.....	600
23	Naitee	150	50	61	50	50	...	100	50	300	..	150	...	...	...	25	25	...	...	...	... ..	1,011
24	Baladanga	30	15	20	15	8	...	5	25	217	...	40	...	...	...	5	20	...	..	...	.....	400
25	Boolta	10	6	8	7	...	...	10	8	55	..	55	.	..	...	9		...	...	..	.....	168
		(2,831)		1,123	2,150	756	260	1,481	36	8,576	191	2,018	20	85	151	296	75	...	...	518	12	20,899

Number.	Village.	Bastu.	Udbastu.	Tank, &c.	Garden.	Bamboo.	Pan.	Sugarcane.	Potato.	Haimontik paddy.	Aus.	Jute and kolai.	Indigo.	River.	Khal.	Road.	Bhagar.	Jungle.	Bhil.	Polit.	Total.
1	Modhubati	22	11	10	6	4	...	20	30	125	...	60	...	...	...	2	...	...	...	10	300
2	Gunradhurpur	36	12	62	100	25	...	100	100	177	136	369	...	...	10	16	...	...	...	7	1,150
	Bonkristopur	7	4	14	18	15	...	19	40	77	35	85	...	...	2	3	...	...	...	2	321
3	Shibrambati	...	...	...	...	...	...	...	...	225	...	...	...	...	...	...	...	...	25	...	250
4	Monirampur	25	5	20	25	15	...	25	40	250	...	295	25	9	...	6	...	...	...	60	1,977
	Hariadoho	6	2	4	...	4	...	25	25	150	...	175	10	...	...	2	...	...	...	10	
	Khongar	1	...	...	1	1	...	2	5	40	...	30	5	5	...	10	...	...	...	5	
	Koomragoree	10	5	5	10	5	...	25	50	150	...	325	25	15	...	4	...	...	...	30	
5	Madhabpur	300	50	60	100	50	...	15	40	125	...	100	...	10	...	30	...	...	...	50	930
6	Jonardhunpur	18	8	20	25	17	...	5	9	280	...	93	4	...	1	6	...	...	...	23	509
7	Dattapur	9	4	5	55	23	...	16	16	220	...	135	9	20	...	40	...	...	...	15	567
8	Khoragoree	40	10	20	30	10	...	...	...	20	...	160	...	...	4	5	...	...	...	1	300
9	Baksha	110	30	200	200	100	...	40	30	900	...	200	...	10	...	30	...	...	...	50	1,900
	Jonai	300	250	200	150	50	...	10	12	800	...	126	...	10	...	5	...	Band	...	25	1,938
11	Kristorampur	250	75	115	50	25	...	25	325	2,110	...	250	5	...	...	50	...	10	...	15	3,305
12	Kristochuck	20	5	8	3	3	...	2	15	174	...	15	2	...	...	2	...	...	...	1	250
13	Jogoonnathbaty	25	30	40	3	5	...	...	25	217	...	25	...	...	...	..	...	...	...	30	400
14	Koomirmorah	210	110	100	20	40	...	50	...	2,614	...	50	...	...	...	...	...	...	...	70	3,264
15	Romanathpur	175	70	70	22	20	...	40	35	2,010	...	70	...	...	...	...	...	...	...	80	2,592
16	Gokoolpur	23	17	20	8	2	...	...	...	1,160	...	23	...	...	...	...	...	...	...	47	1,300
17	Bamundanga	40	8	54	69	5	...	16	3	223	2	50	...	...	18	15	...	...	...	105	608
18	Joka	...	...	...	...	...	...	...	...	70	...	...	...	...	...	...	...	...	...	...	70
19	Kolachora	55	45	100	100	20	...	66	4	500	15	125	...	...	...	20	...	...	...	5	1,050
20	Banipur	13	8	20	8	6	...	8	...	141	...	30	...	...	...	1	...	...	...	1	236
21	Pyragacha	100	50	30	200	20	...	50	30	100	20	120	...	...	...	25	...	...	...	3	748
22	Chanditola	(85)		50	(125)		...	50	4	130	...	125	...	...	40	8	...	...	...	...	617
23	Borijhati	102	87	30	100	6	...	58	...	100	...	40	...	...	...	...	...	...	...	5	528
24	Makhalpara	1	...	42	6	...	...	25	...	610	...	5	...	...	...	...	...	...	20	5	715
25	Aujoodhya	35	30	78	84	12	...	50	...	180	...	125	...	...	...	...	...	...	...	41	635
26	Osmanpur	...	...	12	...	...	...	...	...	483	...	...	...	...	...	...	...	...	...	15	510
27	Khanpur	30	10	...	70	...	...	50	...	200	...	75	...	...	...	...	...	...	...	18	453
28	Gorolgacha	(250)		10	(100)		...	10	5	200	...	100	...	...	...	...	...	...	...	5	680
29	Kristopur	75	125	50	150	50	...	50	20	463	...	150	...	...	...	2	...	...	...	10	1,145
30	Eklokee	(100)		50	(70)		...	24	...	375	...	60	...	...	...	...	...	...	...	10	689
		(3,529)		1,500	(2,441)		...	876	863	15,599	208	3,591	85	79	75	282	...	10	45	754	29,987

Area in local bighas.

III.—*Towjih figures of area.*

IV.

No.	Village.	Pergunnah.	Area. A.	R.	P.	Revenue.
1	Gungadhurpur	Balia	542	3	25	
2	Monirampur	,, ...	448	2	25	
3	Bonkrishtopur	,, ...	97	2	20	
4	Madhubpur	,, ...	367	3	21	
5	Duttpur	,, ...	185	0	15	
6	Baksha	,, ...	729	0	12	
7	Jonai	,, ...	883	2	30	
8	Pyragacha	,, ...	431	3	0	
9	Benipore	,, ...	108	7	0	
10	Chunditolla	,, ...	289	2	37	
11	Kristochuck	,, ...	63	0	23	
12	Kristorampur	,, ...	1,295	2	27	
13	Jagonathbatty	,, ...	148	2	19	
14	Jonardhunpur	,, ...	94	2	25	
15	Koomirmora	,, ...	1,005	0	3	
16	Romanathpur	,, ...	1,105	0	3	
17	Gocoolpur	,, ...	515	0	2	
18	Bamundanga	,, ...	352	1	12	
19	Joka	,, ...	.....			
20	Kolachora	,, ...	694	2	2	
21	Aujoodhya	,, ...	410	3	3	
22	Duffarpur	,, ...	604	3	27	
23	Makhalparah	,, ...	238	3	35	
24	Borijhatty	,, ...	297	1	15	
25	Gorulgacha	Bhoorsoot...	250	1	31	
26	Khanpore	Balia	262	2	6	
27	Krishtopur	,, ...	435	1	2	
28	Eklokee	,, ...	249	0	32	
29	Monberh	,, ...	433	3	6	
30	Kalipore	,, ...	27	1	2	
31	Mirgola	,, ...	985	3	34	
32	Monohurpore	,, ...	513	1	13	
33	Koosaigachee	Baro	274	2	6	
34	Roghoonathpur	Balia	131	2	29	
35	Chundigurh	,, ...	25	3	29	
36	Kanaipur	Baro	405	1	32	
37	Boira	,, ...	405	0	17	
38	Khord Boira	,, ...	230	0	29	
39	Bamshye	,, ...	666	2	21	
40	Bosipota	,, ...	133	0	39	
41	Makhla	,, ...	668	8	19	
42	Okhurdoho	,, ...	234	0	19	
43	Tajpur	,, ...	288	2	20	
44	Khooserai	,, ...	272	3	30	
45	Begumpur	,, ...	520	1	34	
46	Adan	,, ...	268	0	12	
47	Bankagacha	,, ...	118	0	34	
48	Shibrambatty	Balia	111	2	26	
49	Gunna	,, ...	90	3	1	
50	Khoragorce	,, ...	174	2	38	
51	Modhoobatty	,, ...	157	2	21	

Revenue of mehals by villages separately is not kept in this record; it is kept according to towjih mehals, which can be given if required.

GORACHAND CHUCKERBUTTY,
Record-keeper.

The 9th January 1883.

IV.—*Table showing outturn and straw needed for feeding cattle and thatch.*

1 Village.	2 Area in acres.	3 Beegahs of haimontic paddy.	4 Thatched Houses.	5 Cattle.	6 Remarks.
Gungadhurpore and Bonkristopur.	640	254	894	678	
Monirampur, &c.	448½	590	669	306	
Krishtorampur	1,296	2,110	1,448	833	
Joggonathbatty	148	217	265	164	
Koomirmorah	1,005	2,614	1,672	674	
Madhubpore	308	125	543	501	
Baksha	729	900	1,105	526	
Duttpore	185	220	145	205	
Jonardunpore	148	280	126	80	
Khonragoree	175	20	297	191	
Jonai	883	800	1,511	705	
Pyragacha	432	100	450	292	
Benipur	108	141	142	94	
Kolachora	694	500	464	254	
Chunditolla	290	130	569	313	
Bamundanga	352	223	282	208	
Borizhatty	297	100	739	396	
Aujoodhya	411	.....	255	225	
Gorulgacha	250	200	628	291	
Makhalparah	239	610	.....	.....	
Khristopur	435	463	673	289	
Khanpore	262	200	386	269	
Eklokee	249	375	254	101	
Tajpore	288	350	837	288	
Khurserai	273	76	787	310	
Begumpur	520	145	1,082	507	
Adan	268	43	428	249	
Bankagacha	118	60	162	128	
Monohurpore	513	777	589	396	
Kalipur	27	.....	76	31	
Mirgola	986	1,880	844	397	
Monbor	434	637	580	311	
Kanaipur	405	600	86	291	
Boira	405	135	78	230	
Total ...	14,281½	15,875	19,066	10,733	

Standard bighas		18,670 Kahans.
Average yearly straw required to thatch the houses at two kahans every four years...		9,533
Average yearly straw to feed the cattle at 2 kahans a pair for all		10,694
Total ...		20,227
Maximum produce in straw of 18,670 standard bighas of paddy		18,670
Less half as the least possible deduction for useless and deficient straw ...		9,335
Deficiency to be made up by purchase		11,293

V.—*List of villages classified in rate areas.*

Area I ...	Low-land, parts of villages—
	Gungadhurpur.
	Diguldengee.
	Gona.
	Bonkrishtopur.
	Krishtorampur, west field .
	Jaggonathbatty.
	Koomirmorah.
	Romanathpur.
Area II ...	High-land, parts of villages—
	Gungadhurpur.
	Hariadaho, Koomragoree, Khongur — Parts of village Monirampur.
	Bonkrishtopur.
	Krishtorampur.
	Jagonnathbatty.
	Koomirmorah.
	Romanathpur.
	Gokoolpur.
Area III ...	Low-land, parts of villages—
	Monirampur.
	Madhubpur.
	Krishtorampur.
	Duttpur.
	Jonardhunpur.
	Khonragoree.
	Baksha.
	Jonai.
	Pyragacha.
	Kolachora.
	Joka.
	Bamundanga.
	Gokoolpur.
	Chunditolla.
	Aujoodhya.
	Osmanpur.
	Makhalparah.
	Borizhatty.
	Goralgacha.
	Khanpur.
	Eklokee.
Area IV ..	High-land and tora land, parts of villages—
	Monirampore.
	Khurserai.
	Tajpur.
	Madhubpur.
	Begumpur.
	Baksha.
	Duttpur.

Area IV—*contd.*	
	Khonragoree.
	Jonardhunpur.
	Adan.
	Bankagacha.
	Jonai.
	Janim.
	Chickrunt.
	Pyragacha.
	Benipur.
	Kolachora.
	Chunditolla.
	Bamundanga.
	Noitee.
	Beladanga.
	Borizhatty.
	Aujoodhya.
	Goralgacha.
	Boorta.
	Gobra.
	Monohurpur.
	Kalipur.
	Krishtopur.
	Eklokee.
	Khanpur.
	Mirgola.
	Monberh.
Area V	Low-land, and parts of—
	Mirgola.
	Monberh.
	Roghoonathpur and other villges not under enquiry.
Area VI	High-land, parts of village—
	Choto Boira.
	Boro Bohera.
	Kanaipur.
	Banshye.
	Chundigurh.
	Khorial.
	Koosaigachee.
	Bosipota.
	Roghoonathpur.
	Makhla.
Area VII ...	Low-land, containing lands of villages—
	Choto Boira.
	Boro Boira.
	Kanaipur.
	Banshye.
	Khorial
	Koosaigachee.
	Bosipota.
	Roghoonathpur.
	Makhla.

VI.—*List of Tables*

Table showing the classes of lands and

Number.	Village.	Bastoo.		Garden.				Tank, &c.			Danga.				
		Bastoo.	Udbastoo.	Bagat or garden.	Plantain or kola.	Bamboo.	Betel-leaves.	Tank.	Dobs.	Julhuri.	Danga.	Danga awal.	Danga doim.	Danga seyam.	Danga (indigo).
		Rs. A.	Rs. A.	Rs. A.	Rs.	Rs. A.	Rs.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs.
L. 1 and 3	Gungadhurpur and Bonkrishtopur, talookdar Monohur Mookerjee of Uttarpara.	10 0	7 8	...	6	5 0	..	5 0	3 0	4 0	...	6 8	6 0	...	...
E. 5	Duttpore, zemindar Chunder Kant Mookerjee of Jonai.	10 0	8 0	5 0	...	6 0	...	...	2 12	3 12	...	4 0	3 0	...	...
L.	Jonai, talookdar Chunder Kant Mookerjee of Jonai.	10 0 to 15 0	8 0 to 10 0	...	...	...	...	5 0	2 8	3 12	...	3 8	2 12	2 0	...
E. 14	Jouardhunpur, zemindar Chunder Kant Mookerjee of Jonai.	10 0	8 0	5 0	4-8	6 0	...	...	2 12	3 12	...	4 0	3 0	2 8	...
L. 12	Krishtorampur, putni talookdar Aukhoy Coomar Soor of Begumpore.	3 0 to 6 0	2 0 to 4 0	3 0 to 4 0	...	...	...	4 0	...	...	...	...	...	...	...
E. 15	Koomirmorah, zemindar Hurihur Mookerjee of Uttarpara.	10 0	7 8	5 0	...	5 0	...	5 0	2 0	3 12	5 10	5 10	5 10	...	...
E. 17	Gokoolpore, zemindar Joy Kristo Moorkerjee of Uttarpara.	10 0	...	...	...	...	...	...	...	...	...	5 0	...	...	...
E.	Gokoolpur, zemindar Hurihur Mookerjee of Uttarpara.	10 0	7 8	...	...	...	...	...	2 0	...	...	5 10	...	...	...
E.	Krishtopur, zemindar Bejoy Kissen Mookerjee of Uttarpara; putni talookdar Bejoy Kissen Mookerjee, 10 annas 6 pie.	10 0	7 8	5 0	4	6 0	...	4 0	1 0	2 0	...	4 0	3 0	2 4	...
L.	Anjoodhya, putni talookdar Khagendronath Mookerjee of that place.	10 0	...	6 0	...	4 0	...	3 0	...	...	...	...	...	...	...
L.	Osmanpur, putni talookdar Khagendronath Mookerjee of that place.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
E. 28	Eklokee, zemindar Joy Kissen Mookerjee of Uttarpara.	10 0	7 8	6 0 to 8 0	5	5 0	...	5 0	4 0	...	...	5 0	4 0	...	...
E. 29	Monberh, zemindar Joy Kissen Mookerjee; zemindar Monohur Mookerjee of Uttarpara.	10 0	7 8	6 0 to 7 0	...	6 0	...	4 0	2 0	...	...	5 0	4 0	...	...
E. 30	Kallypur, zemindar Joy Kissen Mookerjee of Uttarpara.	10 0	7 8	6 0	...	6 0	...	4 0	2 0	...	...	4 8	4 0	...	...
L. 36	Kanaipur, zemindar Hurish Mitter of Connagar.	6 0 to 8 0	4 0	4 0 to 7 0	...	4 0	...	4 8	...	...	...	...	...	...	...
37	Khord Boira....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
E.	Boro Boira, talookdar Hurromohun Mookerjee and zemindar Peary Mohun Mookerjee of Uttarpara.	10 0 to 15 0	7 8	5 0 to 7 0	6	7 0	6	8 0	3 0	4 0	...	4 8	3 12	...	...
E.	Adan, zemindar Chunder Kant Mookerjee; zemindar Isur Chunder Mookerjee of Jonai.	10 0	7 8	5 0	6-0	6 0	8	5 0	3 8	...	3 8	...	...	...	3
E.	Khurserai, Government estate.	8 0	5 0	4 0	4	2 8	...	3 0	2 0	...	2 0	...	...	...	...

NOTE.—L means that figures were taken from a list only. E. that they were taken from Ekwalse, or abstracts of Jamabundi.

of rates filed.

rates prevalent in villages under enquiry.

Soona.					Salli.						Waste or Uncultivable.						
Soona (bir) awal.	Soona awal	Soona doim.	Soona seyam.	Soona chaharam.	Salli (bir) awal.	(Kama Dhopa) Salli awal.	Salli awal.	Salli doim.	Salli seyam.	Salli chaharam.	Pulit.	Grass.	Sugarcane.	Khoree.	Bank of river.	Too or mulberry.	Date garden.
Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.
6 0	6 0	5 8	5 0	...	5 8	...	5 8	5 0	4 8	...	1 0	...	...	...	...	...	...
...	4 4	3 4	2 12	...	...	...	4 4	3 4	2 12	...	.....	...	...	...	...	...	...
...	4 0	3 0	2 4	...	...	...	3 8	2 12	2 0	...	.....	..	...	...	...	...	...
...	4 4	3 4	2 12	...	...	...	4 4	3 4	...	...	.....	2 0	...	...	...	...	...
...	2 0 to 4 0	1 8 to 3 8	1 0 to 3 0	0 12 to 2 0	...	...	1 8 to 4 0	1 0 to 3 8	1 0 to 2 8	0 12 to 1 8	.....	0 8	...	...	...	...	...
...	4 12	4 12	...	...	4 0	2 8	3 8	3 0	...	...	.....	1 0	...	...	...	...	...
...	4 0	...	...	...	...	...	3 0	2 8	...	...	1 8	...	...	...	...	...	...
...	4 12	4 12	...	...	...	...	2 8 to 3 0	2 0	...	...	2 8	1 0	...	...	...	...	...
...	3 0	2 8	2 0	...	...	...	3 0	2 4	1 12	...	1 0	1 0	...	...	...	6 0	...
...	5 0	...	...	...	...	...	3 0	...	...	...	.....	...	8 0	...	...	...	...
...	...	...	...	...	...	...	2 0	...	...	...	.....	...	...	...	...	...	...
...	5 0	...	...	...	...	...	4 0	3 0	...	...	2 8	...	...	...	...	...	...
...	5 0	4 0	...	...	...	...	3 8	2 12	...	...	.....	...	...	...	...	...	...
...	5 0	4 0	...	...	...	...	3 8	2 12	...	...	.....	...	...	...	...	...	...
...	3 4	...	...	...	...	...	1 0 to 2 8	1 0 to 1 8	1 0	0 8	0 8	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	.....	...	...	...	...	...	...
...	5 0	3 12	...	...	...	...	4 0	3 0	2 4	1 8	3 0	...	...	...	...	...	4 0
...	3 12	...	...	...	...	...	3 0	2 4	...	...	.....	...	...	4 0	4 4	...	...
4 0	...	...	...	...	3 8	...	...	...	...	...	.....	...	...	...	...	...	...

VII.—*General table of outturns.*

Outturn of Crops.

Number.	Village.	Class.	Weight.	By bulk.	Total.	Remarks.
				Straw.	Rs.	
1	Given by Baboo Peary Mohan Mookerjea.	.....	12 to 15 maunds at Re. 1, Rs. 12 to Rs. 15.	1 kahan at Rs. 4, Rs. 4.	16 to 19	
					Rs. a.	
2	Tajpur	Sali awal ...	8¾ maunds at Re. 1, Rs. 8-12.	Ditto ditto ...	12 12	
3	Ditto	Ditto ...	7½ maunds at Re. 1, Rs. 7-8.	Ditto ditto ...	11 8	
4	Kharserai	Ditto ...	7 maunds at Re. 1, Rs. 7.	Ditto ditto ...	11 0	
5	Jonai	Suna (jote) ..	4 maunds at Rs. 3, Rs. 12.	Ditto ditto ...	12 0	
6	Ditto	Do. (kolsi) ..	2 maunds at Rs. 2-8, Rs. 5.	Ditto ditto ...	5 0	
7	Baksha	Sali awal ...	8¼ maunds at annas 14, Rs. 7-3.	Ditto ditto ...	11 3	
8	Khoragori... ...	Ditto ...	8¾ maunds at annas 14, Rs. 7-5.	Ditto at Rs. 4-8, Rs. 4-8.	11 13	
9	Dattapur	Ditto ...	7 maunds at annas 14, Rs. 6-2.	12 pon at Rs. 5-5-3, Rs 4.	10 2	
10	Jonardhunpur ...	Sali doim (after jute).	7 maunds 7 seers at annas 14, Rs. 6-4	1 kahon at Rs. 4, Rs. 4	10 4	
11	Ditto ...	Sali awal ..	7 maunds 35 seers at annas 14, Rs. 6-12.	Ditto ditto ...	10 12	
12	Diguldingi... ...	Sali doim ...	10 maunds at Re. 1, Rs. 10.	Ditto ditto ...	14 0	
13	Gungadhurpur ...	Sali awal ...	11 maunds 29 seers at Re. 1, Rs. 11-12.	Ditto ditto ...	15 12	
14	Koomragri ...	Ditto ...	6½ maunds at annas 12 Rs. 5.	12 pon at Rs. 4 per kahan, Rs. 3.	8 0	
15	Ditto ...	Ditto ...	8 maunds 35 seers at annas 12, Rs. 6-10.	1 kahan at Rs. 4, Rs. 4	10 10	
16	Monirampur ...	Ditto ...	10 maunds at annas 12, Rs. 7-8.	Ditto ditto ...	11 8	
17	Madhabpur ...	Ditto ...	8 maunds 25 seers at annas 12, Rs. 6-7.	Ditto ditto ...	10 7	
18	Kristopur ...	Ditto ...	9 maunds 24 seers at annas 12, Rs. 7-2.	1 kahan at Rs. 3-8, Rs. 3-8.	10 10	
19	Ditto ...	Ditto ...	8 maunds at annas 12, Rs. 6.	1 kahan at Rs. 3-4, Rs. 3-4.	9 4	
20	Ditto ...	Ditto ...	9 maunds at annas 12, Rs. 6-12.	Ditto ditto ...	10 0	
21	Kalipur	Suna (jute) ...	2¾ maunds at Rs. 2-14, about Rs. 8.	.....	8 0	
22	Khoryal	Sali awal ...	6 maunds at Re. 1, Rs. 6.	1 kahan at Rs. 3, Rs. 3	9 0	
23	Ditto	Ditto ...	4½ maunds at Re. 1, Rs. 4-8.	Ditto ditto ...	7 8	
24	Ditto	Sali doim (not manured).	4 maunds 20 seers at Re. 1, Rs. 4-8.	Ditto ditto ...	7 8	
25	Ditto	Sali doim ...	6 maunds 30 seers at Re. 1, Rs. 6-12.	Ditto ditto ...	9 12	
26	Makhla	Sugarcane (goor).	15 maunds at Rs. 6-12, about Rs. 100.	Ditto ditto ...	100 0	
27	Ditto	Sali upper (manured).	4 maunds at Re. 1, Rs. 4.	Ditto ditto ...	7 0	
28	Ditto	Sali lower ...	6 maunds at Re. 1, Rs. 6.	1 kahan at Rs. 2-8, Rs. 2-8.	8 8	
29	Ditto	Sali doim (not manured).	4 maunds 15 seers at Re. 1, Rs. 4-6.	1 kahan at Rs. 3, Rs. 3	7 6	
30	Ditto	Sali awal (1st crop for 15 years).	4 maunds 30 seers at Re. 1, Rs. 4-12.	Ditto ditto ...	7 12	
31	Mirgola	Sali awal ...	4 maunds 2 seers at Re 1, Rs. 4	18 pons at Rs. 3 per kahan, Rs. 3-6.	7 6	
32	Monberh	Ditto (manured).	4 maunds 13 seers at Re. 1, Rs. 4-5.	Ditto ditto ...	7 11	
33	Ditto (milki)...	Sali awal (well manured).	5 maunds 30 seers at Re. 1, Rs. 5-12.	Ditto ditto ...	9 2	

VII.—*General table of outturns*—continued.

Number.	Village.	Class.	Weight.	By bulk.	Total.	Remarks.
					Rs. A.	
34	Monberh	Sona (jute) with manure.	4 maunds at Rs. 2-14, Rs. 11-8.	.....	11 8	
35	Ditto	Sona kolai ...	2 maunds at Rs. 1-8, Rs. 3.	.....	3 0	
36	Choto Boira ...	Sali rice ...	3¼ maunds at Re. 1, Rs. 3-4.	1 kahan at Rs 1-12. Rs. 1-12.	5 0	
37	Ditto ...	Ditto ...	3¼ maunds at Re. 1, Rs. 3-4.	1¼ kahan at Rs. 2-12, Rs. 3.	6 4	
38	Ditto ...	Sali ...	3 maunds 11 seers at Re. 1, Rs. 3-12.	1 kahan at Rs. 2-12, Rs. 2-12.	6 0	
39	Boro Boira ...	Sali awal ...	3 maunds 33⅓ seers at Re. 1, Rs. 3-12.	Ditto ditto ...	6 8	
40	Ditto ...	Sugarcane (goor).	12 maunds at Rs. 3-8, Rs. 42.	.....	42 0	
41	Ditto ...	Dhoncha ...	.....	100 bundles at Rs. 4, Rs. 4.	4 0	
42	Ditto ...	Sali doim ...	2 maunds 17 seers at Re. 1, Rs. 2-8.	1 kahan at Rs. 2, Rs. 2	4 8	
43	Ditto ...	Jute ...	3 maunds at Rs. 3, Rs. 9.	.....	9 0	
44	Kanaipur ...	Sali	2 maunds 28 seers at Re. 1, Rs. 2-12.	1 kahan at Rs. 2, Rs. 2	4 12	
45	Kristorampur ...	Sali awal ...	8 maunds 12 seers at annas 14, Rs. 7.	1 kahan at Rs. 3. Rs 3	10 0	
46	Ditto ...	Sali d im ...	4½ maunds, at annas 14, Rs. 4.	1 kahan, at Rs. 3, Rs. 3	7 0	
47	Ditto ...	Potatoes ...	36 maunds, at Rs. 1-8, Rs. 54.	.....	54 0	
48	Ditto ...	Sali awal ...	9 maunds 27 seers, at annas 14, Rs. 8-8.	1 kahan, at Rs. 3, Rs. 3	11 8	
49	Ditto ...	Jute ...	3⅓ maunds, at Rs. 2-14, Rs. 10.	.....	10 0	
50	Ditto ...	Kolai ...	1½ maunds, at Rs. 1-8, Rs. 2-4.	.....	2 4	
51	Ditto ...	Sali doim ...	4 maunds 3 seers, at annas 14, Rs. 3-8.	12 pons, at Rs. 3, Rs 2-4.	5 12	
52	Kristo Chuck ...	Sali awal ...	7½ maunds, at annas 14, Rs. 6-8.	1 kahan, at Rs. 3, Rs. 3	9 8	
53	Ditto ...	Sali seyam ...	Ditto ditto ...	.....	6 8	
54	Ditto ...	Ditto ...	8 maunds 30 seers, at annas 14, Rs. 7-10.	.....	7 10	
55	Jugonnathbati ...	Pot toes (Bombay).	50 maunds, at Rs. 1-6...	.....	69 0	
		Potatoes (deshi).	40 ,, ,, 1-2...	.....	50 0	
56	Kolachorah ...	Sali awal ...	6 ,, at annas 14, Rs. 5-4.	.....	5 4	
57	Ditto ...	Ditto ...	8 maunds, at annas 14, Rs. 7	.....	7 0	
58	Ditto ...	Sugarcane (goor).	21 maunds, at Rs. 3, Rs. 63.	.....	63 0	
59	Ditto ...	Sali doim ...	4 maunds 5 seers, at annas 14, Rs. 3-10.	.....	3 10	
60	Ditto ...	Jute ...	3½ maunds, at Rs. 2-12, Rs. 9-10.	.....	9 10	
61	Ditto ...	Kolai ...	2 maunds, at Rs. 1-8, Rs. 3.	.....	3 0	
62	Benipore ...	Sali ...	2 maunds 30 seers, at annas 14, Rs. 2-8.	.....	2 8	
63	Pyragucha ...	Sali doim ...	8 maunds, at annas 14, Rs. 7.	.....	7 0	
64	Ditto ...	Sugarcane (goor).	21 maunds at Rs. 3, Rs. 63.	.....	63 0	
65	Ditto ...	Jute ...	4 maunds, at Rs. 3 ...	.....	12 0	
		Do. ...	6 ,, at ,, 3 ...	.....	18 0	
66	Ditto ...	Kolai ...	2 ,, at ,, 2 ...	.....	4 0	
67	Begumpur ...	Sali doim ...	4 ,, at annas 14, Rs. 4-6	12 pons, at Rs. 2-3, Rs. 1-14.	6 4	
68	Ditto ...	Sali awal ...	7 maunds, at annas 14, Rs. 6-2.	1 kahan, at Rs. 2-8, Rs. 2-8.	8 10	

VII.—*General table of outturns*—continued.

Number.	Village.	Class.	Weight.	By bulk.	Total.	Remarks.
				Straw.	Rs. A.	
69	Begumpur ...	Pan ...	.....	.....	300 0	
70	Ditto	Potato { Country.	40½	.....	45 0	
		Potato { Bombay.	00½	.....	7 12	
71	Ditto	Jute ...	3 maunds, at Rs. 2-12	.....	8 4	
72	Ditto	Kolai ...	1½ ,, at ,, 1-8. Rs. 2-8.	.....	2 8	
73	Adan	Sali doim ...	5 maunds, at annas 14, Rs. 4-6.	1 kahan, at Rs. 3, Rs. 3	7 6	
74	Do.	Potato { Bombay.	40 maunds, at Rs. 1-8	.....	60 0	
		Potato { Country.	30 ,, at ,, 1-2	.....	33 12	
75	Do.	Pan ...	.....	.....	400 0	
76	Do.	Jute ...	4½ maunds, at Rs. 2-12	.....	12 6	
77	Do.	Kolai ...	1½ ,, at ,, 2 ...	.....	3 0	
78	Roghunathpur ...	Sugarcane (goor).	14 ,, at ,, 3-6	At Rs. 3-6	47 4	
79	Ditto	Jute ...	4½ ,, at ,, 2-14	.....	13 0	
80	Ditto	Amon rice sali awal.	8 ,, at annas 15, Rs. 7-8.	1 kahan, at Rs 3, Rs. 3	10 8	
81	Ditto	Sali doim ...	6 maunds, at annas 15, Rs. 5-10.	14 pons, at Rs. 3, Rs. 2-10.	8 4	
82	Kushaigacha ...	Ditto ...	5 maunds, at annas 15. Rs. 4-11.	1 kahan, at Rs. 3 ...	7 11	
83	Monohurpur ...	Jute { with manure.	4 maunds, at Rs. 3, Rs. 12.	.....	13 0	
		Jute { without.	2½ maunds, at Rs. 3, Rs. 7-8.	Pakati, about 8 bundles, Re. 1.	8 8	
84	Gorulgacha ...	Sali doim ...	6 maunds 10 seers at Re. 1, Rs. 6-4.	12 pons, at Rs. 2-8, Rs. 1-14.	8 2	
85	Ditto	Sali awal ...	5½ maunds, Rs. 5-12 ...	1 kahan, at Rs. 3, Rs. 3	8 12	
86	Ditto	Jute ...	4 ,, at Rs. 3, Rs. 12.	.....	12 0	
87	Ditto	Sugarcane (goor).	.....	.....	...	
88	Ditto	Kolai ...	.....	.....	...	
89	Makhalpara ...	Sali doim ...	7 maunds, at Re. 1, Rs. 7.	12 pons, at Rs. 2, Rs. 1-8.	8 8	
90	Ditto	Sali awal ...	9 maunds, at Re. 1, Rs. 9.	1 kahan, at Rs. 2, Rs. 2	11 0	
91	Borizhati	Ditto ...	9 maunds, at Re. 1, Rs. 9.	1 kahan, at Rs. 2-12, Rs. 2-12.	11 12	
92	Ditto	Ditto ...	7 maunds 26 seers, at Re. 1, Rs. 7-10.	1 kahan, at Rs. 3, Rs. 3	10 10	
93	Joka	Ditto ...	9 maunds, at annas 12, Rs. 6-12.	.....	6 12	
94	Do.	Sali doim ...	4 maunds 15 seers, at annas 12, Rs 3-4½.	.....	3 4½	
95	Bamundanga ...	Jute	4 maunds, at Rs. 2-14, Rs. 11-8.	.....	11 8	
96	Ditto	Sugarcane (goor).	24 maunds, at Rs. 3, Rs. 72.	.....	72 0	
97	Ditto	Kolai ...	2 maunds at Rs. 2-8, Rs. 5.	.....	5 0	
98	Ditto	Baigun ...	48 pons, at Rs. 5 ...	.....	15 0	
99	Ditto	Sali awal ...	7 maunds 26 seers, at annas 12, Rs. 5-8.	.....	5 8	
100	Aujoodhya ...	Ditto ...	5 maunds, at annas 12, Rs. 3-12.	10 pons, at Rs. 2-12, Rs. 1-13.	5 9	
101	Ditto	Ditto ...	Ditto ditto ...	Ditto ditto ...	5 9	
102	Ditto	Sali doim ...	4 maunds, at annas 12, Rs. 3.	.....	3 0	
103	Ditto	Sali seyam ...	2 maunds, at annas 12, Rs. 1-8.	.....	1 8	
104	Ditto	Jute ...	4½ maunds, at Rs. 3, Rs. 13-8.	.....	13 8	

VII.—*General table of outturns*—continued.

Number.	Village.	Class.	Weight.	By bulk.	Total.	Remarks.
				Straw.	Rs. A.	
105	Makhalpara ...	Sali seyam ...	4 maunds, at annas 12, Rs. 3.	.....	3 0	
106	Aujoodhya ...	Sugarcane (goor).	18 maunds, at Rs. 3-8, Rs. 63.	.....	63 0	
107	Ditto	Kolai ...	4 maunds, at Rs. 1-12, Rs. 7.	.....	7 0	
108	Khanpur	Sali doim ...	6 maunds 5 seers, at annas 12, Rs. 4-10.	8 pons, at Rs. 2-8, Rs. 1-4.	5 14	
109	Ditto	Ditto ...	5 maunds 35 seers, at annas 12, Rs. 4-7.	1 kahan, at Rs. 2-8, Rs. 2-8.	6 15	
110	Ditto	Baigun ...	.....	60 pons, at Rs. 3, Rs. 11-4.	11 4	
111	Eklokee	Sali awal ...	7½ maunds, at annas 13, Rs. 6.	1 kahan, at Rs. 3, Rs. 3	9 0	
112	Ditto	Sali doim ...	6 maunds, at annas 13, Rs. 5.	10 pons, at Rs. 3, Rs. 2-8.	7 8	
113	Ditto	Sali awal ...	6 maunds, 2 seers, at annas 13, Rs. 5.	1 kahan, at Rs. 3, Rs. 3	8 0	
114	Ditto	Ditto ...	8 maunds, at annas 13, Rs. 6-8.	Ditto ditto ...	9 8	
115	Ditto	Sugarcane (goor.)	20 maunds, at Rs. 3-2, Rs. 75.	.....	75 0	
116	Ditto	Kolai ...	3 maunds, at Rs. 2, Rs. 6.	.....	6 0	
117	Ditto	Jute ...	3¾ maunds, at Rs. 2-12	.....	9 10	
118	Koomirmorah ...	Sali bir awal...	8 maunds, at Rs. 1, Rs. 8.	1 kahan, at Rs. 3, Rs. 3	11 0	
119	Ditto	Do. awal ...	8 maunds, at annas 14, Rs. 7.	1 kahan, at Rs. 1-4, Rs. 1-4.	8 4	
120	Ditto	Do. doim ...	6½ maunds, at annas 14, Rs. 5-11.	1 kahan, at annas 8 ...	6 3	
121	Ditto	Do. seyam and chaharun.	6 maunds, at annas 14, Rs. 5-4.	.....	5 4	
122	Ditto	Sali awal ...	9 maunds 15 seers, at annas 14, Rs. 8.	1 kahan, at Rs 1-4, Rs. 1-4.	9 4	
123	Ditto	Ditto ...	9 maunds 15 seers, at annas 14, Rs. 8-2.	Ditto ditto ...	9 6	
124	Ditto	Sali doim ...	3 maunds, at annas 14, Rs. 2-10.	.....	2 10	
125	Ditto	Jute ...	4½ maunds, at Rs. 2-14	.....	12 15	
126	Ditto	Kolai ...	2 ditto „ 2	.....	4 0	
127	Ditto	Potatos (Bombay).	40 ditto „ 2	.....	80 0	
128	Ditto	Potatos (Country).	40 ditto „ 1-8	.....	60 0	
129	Ditto	Sali doim ...	4 ditto, at annas 12	.....	3 0	
130	Romanathpur ...	Awal ...	7½ ditto „ 12, Rs. 5-10.	1 kahan, at Rs. 3, Rs. 3	8 10	
131	Ditto	Doim ...	6½ maunds, at annas 12, Rs. 4-14.	Ditto ditto ...	7 14	
132	Ditto	Seyam and chaharun.	5 maunds. at annas 12, Rs. 3-12.	.....	3 12	
133	Ditto	Sali awal ...	5 maunds 7 seers, at annas 12, Rs. 4.	1 kahan, at Rs. 3, Rs. 3	7 0	
134	Ditto	Sali doim ...	4 maunds, at annas 19, Rs. 3.	.....	3 0	
135	Ditto	Sugarcane (goor).	23 maunds. at Rs. 3-4	.....	74 12	
136	Ditto	Jute	4½ ditto „ 2-12	.....	13 0	
137	Gokoolpoor ...	Sali awal ...	5¼ ditto, at annas 13, Rs. 4-8.	13 pons, at Rs. 3, Rs. 2-8.	7 0	
138	Ditto	Sali doim ...	4½ maunds, at annas 13, Rs. 3-11.	.....	3 11	
139	Ditto	Sali seyam and chaharum.	3¾ maunds, at annas 13, Rs. 3.	.....	3 0	
140	Ditto	Sali awal ...	5 maunds 16 seers, at annas 13, Rs. 4-8.	14 pons, at Rs. 3-8, Rs. 2-8.	7 0	
141	Banshye	Ditto ...	4 maunds, at annas 14, Rs. 3-8.	1 kahan, at Rs. 3, Rs. 2	6 8	

VII.—*General table of outturns*—concluded.

Number.	Village.	Class.	Weight.	By bulk.	Total.	Remarks.
					Rs. A.	
142	Banshye	Sali awal ...	6½ maunds, at annas 14, Rs. 5-11.	1½ ditto at Rs. 3, Rs. 4-8.	10 3	
143	Ditto	Sali doim ...	3¾ maunds, at annas 14, Rs. 3-14.	1 kahan at Rs. 2, Rs. 2	5 14	
144	Ditto	Jute ...	5 maunds, at Rs. 3, Rs. 15.	.....	15 0	
145	Ditto	Kolai ...	1½ maunds, at Rs. 2, Rs. 3.	.....	3 0	
146	Bosipota	Sali awal ...	4 maunds, at Re. 1, Rs. 4.	1½ kahans at Rs. 2-8, Rs. 3-4.	7 4	
147	Ditto	Sugarcane ...	12 maunds, at Rs. 3, Rs. 36.	.....	36 0	
148	Ditto	Sali awal ...	5½ maunds, at annas 14, Rs. 4-13.	1 kahan, at Rs. 2-8, Rs. 2-8.	7 8	
149	Chunditolla ...	Ditto ...	7½ maunds, at annas 14, Rs. 6-9.	10 pons, at Rs. 1-2 ...	7 11	
150	Ditto	Ditto ...	5 maunds, at annas 14, Rs. 4-6.	Ditto ditto ...	5 8	
151	Ditto	Sugarcane (goor).	28 maunds, at Rs. 3-8	.....	98 0	
152	Ditto	Jute ...	.....	.....	...	
153	Ditto	Kolai ...	2½ maunds, at Rs. 2, Rs. 5.	.....	5 0	
154	Ditto	Baigun ...	4 kahons, at Rs. 3-8 ...	.....	14 0	
155	Jonai	Sali awal ...	7½ maunds, at annas 14, Rs. 6-9.	1 kahan, at Rs. 3, Rs. 3	9 9	
156	Do.	Sali doim ...	7¼ maunds, at annas 14, Rs. 6-6.	Ditto ditto ...	9 6	
157	Do.	Sali awal ...	7 maunds 37 seers, at annas 14, Rs. 7.	Ditto ditto ...	10 0	
158	Do.	Sali doim ...	6¾ maunds, at annas 14, Rs. 5-7.	Ditto ditto ...	8 7	
159	Do.	Sali seyam ...	5¼ maunds, at annas 14, Rs. 4-13.	10 pons, at Rs. 2, Rs. 1-4.	6 1	
160	Do.	Sali chaharam	5 maunds, at annas 14, Rs. 4-6.	.....	4 6	

VIII.—*East of Saraswati Paddy outturn.*

Outturn of paddy per bigha east of Saraswati.

No.	Village.	Quality.	Paddy.					Straw.					Total amount.		Remarks.	
			Mds.	s.		Rs	a.	K.	p.		Rs.	a.	Rs.	a.	Rs.	a.		
1	Tajpore	Awal	8	30	at	1	0	8	12	1	0	at	4	0	4	0	12	12	Grain weighed.	Straw estimated.
2	Ditto	Do.	7	20	,,	1	0	7	8	1	0	,,	4	0	4	0	11	8	Ditto	ditto.
3	Khesarye	Do.	7	0	,,	1	0	7	0	1	0	,,	4	0	4	0	11	0	Ditto	ditto.
4	Khorial	Do. (manured)	6	0	,,	1	0	6	0	1	0	,,	3	0	3	0	9	0	Stated.	
5	Ditto	Do. (not manured)	4	20	,,	1	0	4	8	1	0	,,	3	0	3	0	7	8	Ditto.	
6	Ditto	Sali doim (not manured)	4	20	,,	1	0	4	8	1	0	,,	3	0	3	0	7	8	W.	E.
7	Ditto	Doim	6	30	,,	1	0	6	12	1	0	,,	3	0	3	0	9	12	W.	E.
8	Makla	Sali doim (manured)	4	0	,,	1	0	4	0	1	0	,,	3	0	3	0	7	0	Stated.	
9	Ditto	Sali awal	6	0	,,	1	0	6	0	1	0	,,	2	8	2	8	8	8	Ditto.	
10	Ditto	Sali doim (not manured)	4	15	,,	1	0	4	6	1	0	,,	3	0	3	0	7	6	W.	E.
11	Ditto	Sali awal (late fallow)	4	30	,,	1	0	4	12	1	0	,,	3	0	3	0	7	12	W.	E.
12	Mirgola	Sali awal	4	2	,,	1	0	4	0	0	18	,,	3	0	3	6	7	6	W.	E.
13	Monberh...	Ditto (manured)	5	30	,,	1	0	5	12	0	18	,,	3	0	3	6	9	2	W.	E.
14	Ditto	Ditto (not manured)	4	13	,,	1	0	4	5	0	18	,,	3	0	3	6	7	11	W.	E.
15	Chota Boira	Sali	3	10	,,	1	0	3	4	1	0	,,	1	12	1	12	5	0	Stated.	
16	Ditto	Do.	3	10	,,	1	0	3	4	1½	0	,,	2	12	3	0	6	4	Ditto.	
17	Ditto	Do.	3	11	,,	1	0	3	4	1	0	,,	2	12	2	12	5	0	W.	E.
18	Ditto	Sali awal	3	33½	,,	1	0	3	12	1	0	,,	2	12	2	12	6	8	W.	E.
19	Ditto	Sali doim	2	17	,,	1	0	2	8	1	0	,,	2	0	2	0	4	8	W.	E.
20	Kanyepore	Sali	2	28	,,	1	0	2	12	1	0	,,	2	0	2	0	4	12	W.	E.
21	Begumpore	Doim	4	36	,,	0	14	4	6	0	12	,,	2	8	1	14	6	14	W.	E.
22	Ditto	Awal	7	0	,,	0	14	6	2	1	0	,,	2	8	2	8	8	10	Stated.	
23	Adan	Doim	5	0	,,	0	14	4	6	1	0	,,	3	0	3	0	7	6	W.	E.
24	Roghonathpore ...	Awal	8	0	,,	0	15	7	8	1	0	,,	3	0	3	0	10	8	Stated.	
25	Ditto	Doim	6	0	,,	0	15	5	10	0	14	,,	3	0	2	10	8	4	Ditto.	
26	Koshaigachi	Do.	5	0	,,	0	15	4	11	1	0	,,	3	0	3	0	7	11	W.	E.
27	Basye	Awal	4	0	,,	0	14	3	8	1	0	,,	3	0	3	0	6	8	W.	E.
28	Do.	Do.	6	20	,,	0	14	5	11	1½	0	,,	3	0	4	8	10	3	Stated.	
29	Do.	Doim	3	30	,,	0	14	3	7	1	0	,,	2	0	2	0	5	7	Ditto.	
30	Rasipota	Awal	4	0	,,	1	0	4	0	1½	0	,,	2	8	3	4	7	4	W.	E.
31	Ditto	Do.	5	20	,,	0	14	4	13	1	0	,,	2	8	2	8	7	5	W.	E.

IX.—*Experiments Paddy outturn east of Saraswati.*

Serial Number of experiment.	2	3	4				5			6				
			Information as to Quantity of Produce.				Information as to selling Price of Produce.			Straw.				
			(a) Area of crop cut for the experiment.		(b)	(c)	(a)	(b)	(c)					
	District, Pergunnah, Thanah, and Village.	Quality of land.	1	2								Total.	Remarks.
			In the unit which was actually used in the calculation of the experiment.	In square yards.	Weight of paddy threshed out in seers of 80 tolahs' weight.	Weight of paddy per bigha of 14,400 square feet obtained by calculation from columns 4 (a) 2 and 4 (b).	Rate.	The same expressed in seers of 80 tolahs' weight per rupee.	Rate per rupee which the officer making the enquiries considers may fairly be taken as the average price at which paddy is ordinarily sold by the ryots to the merchants at the cheapest time of the year.	Quantity of straw.	Value.			
	District Hooghly, thanah tola—				S. C.	Mds. S.	Rs. A.	Rs. A.	Mds. S.	K. P.	Rs. A.	Rs. A.	Rs. A.	
1	Tajpur	Awal ...	16 bundles = ¼ cotta	40	4 12	8 30	1 0	8 12	1 0	1 0 at	4 0	4 0	12 12	No paddy uncut. Bundles counted and 16 taken as equivalent of ¼ a cotta. Dryage three seers to a maund.
2	Ditto	Do. ...	¼ cotta	40	4 0	7 20	1 0	7 8	1 0	1 0 at	4 0	4 0	11 8	The same. Dryage 2½ seers per maund.
3	Kharsarie	Do. ...	23 bundles	40	7 0	7 0	1 0	7 0	1 0	1 0 at	4 0	4 0	11 0	The same. Dryage three seer per maund.

6	Kharial	Doim ...	30′ × 10′	33⅓	4 5	4 20	1 0	6 0	1 0	1 0 at	3 0	3 0	9 0	Cut. Dryage 5 seers per maund.
7	Ditto	Do. ...	40′ × 10′	44⅔	6 7	6 30	1 0	6 12	1 0	1 0 at	3 0	3 0	9 12	Cut. Dryage 5½ seers per maund.
10	Makhla	Do. ...	30′ × 10′	33⅓	4 2	4 15	1 0	4 6	1 0	1 0 at	3 0	3 0	7 6	Cut. Dryage 5 seers to the maund.
11	Ditto	Awal ...	30′ × 10′	33⅓	4 10	4 30	1 0	4 12	1 0	1 0 at	3 0	3 0	7 12	Cut. Dryage 5 seers to the maund.
12	Mirgola	Do. ...	40′ × 10′	44⅔	6 0	4 2	1 0	4 0	1 0	1 2 at	3 0	3 6	7 6	Cut. Dryage and dirt 10 seers per maund.
13	Monberh	Do. ...	30′ × 10′	33⅓	4 8	5 30	1 0	5 12	1 0	1 2 at	3 0	3 6	9 2	Cut. Dryage 8 seers per maund. Manured.
14	Ditto	Do. ...	40′ × 10′	44⅔	8 0	4 13	1 0	4 5	1 0	1 2 at	3 0	3 6	7 11	Cut. Dryage 8 seers per maund. Well manured.
17	Chota Boira	Sali (all awal class).	30′ × 10′	33⅓	3 6½	3 11	1 0	3 4	1 0	1 0 at	2 12	2 12	6 0	Cut. Dryage 5 seers per maund. Manured.
18	Boro Boira	Awal ...	40′ × 10′	44⅔	5 4	3 33⅓	1 0	3 12	1 0	1 0 at	2 12	2 12	6 8	Cut. Dryage 7½ seers per maund
19	Ditto	Doim ...	30′ × 10′	33⅓	2 5	2 17	1 0	2 8	1 0	1 0 at	2 0	2 0	4 8	Cut. Dryage 5 seers per maund.
20	Kanaipur	Sali ...	30′ × 12′	40	3 6½	2 28	1 0	2 12	1 0	1 0 at	2 0	2 0	4 12	Cut. Dryage 8 seers.
21	Begumpur	Doim ...	12′ × 30′	40	5 9	4 36	0 14	4 6	1 5⅓	0 12 at	2 8	1 14	6 4	Cut. Dryage 5 seers. Only field uncut.
23	Adan	Do. ...	30′ × 12′	40	6 9	5 0	0 14	4 6	1 5⅓	1 0 at	3 0	3 0	7 6	Cut. Dryage 10 seers.
26	Kusaigachi	Awal ..	4 bundles	26⅔	.....	5 0	0 15	4 11	1 2⅔	1 0 at	3 0	3 0	7 11	None left uncut. 640 bundles on 9 cottahs. Dryage 5 seers per maund.
27	Basai	Do. ...	12′ × 30′	40	4 0	4 0	0 14	3 8	1 5⅓	1 0 at	3 0	3 0	6 8	Cut. Dryage nil.
30	Boispota	Do. ..	30′ × 12′	40	4 8	4 0	1 0	4 0	1 0	1¼ 0 at	2 8	3 2	7 2	Cut. Dryage 5 seers.
31	Ditto	Do. ...	30′ × 10′	33⅓	5 10	5 20	0 14	4 1	1 5⅓	1 0 at	2 8	2 8	7 5	Cut. Dryage 7½ seers.

X.—*Outturn of Paddy east of Saraswati from enquiry.*

Stated outturn of paddy per bigha east of Saraswati.

1	2	3	4			5		6		7	8
			Information as to Quantity of Produce.			Informationas to Selling Price of Produce.		Straw.			
			(1) (*a*) (2) Area of crop cut for the experiment.	(*b*)	(*c*)	(*a*)	(*b*)	1	2		
Serial number of experiment.	District, pergunnah, or thanah and village.	Description of crop.	In the unit which was actually used in the calculation of the experiment.	Weight of paddy threshed out in seers of 80 tolahs' weight.	Weight of paddy per bigha of 14,400 square feet obtained by calculation from columns 4 (*a*) 2 and 4 (*b*) 1.	Value ascertained locally per maund.	Total value.	Quantity of straw.	Value.	Total.	Remarks.
			In square yards.								
Stated.					Mds. s.	Rs. A. P.	Rs. A. P.	K. P.	Rs. A. P.	Rs. A. P.	
4	Khorial	Haimontic paddy	...	...	6 0	1 0 0	6 0 0	1 0 at Rs 3	3 0 0	9 0 0	This was made according to the statements made locally by the ryots.
5	Ditto	Ditto	...	...	4 20	1 0 0	4 8 0	1 0 at Rs 3	3 0 0	7 8 0	
8	Makhla	Ditto	...	...	4 0	1 0 0	4 0 0	1 0 at Rs. 3	3 0 0	7 0 0	
9	Ditto	Ditto	...	...	6 0	1 0 0	6 0 0	1 0 at Rs. 2-8	2 8 0	8 8 0	
15	Choto Boira ...	Ditto	...	...	3 10	1 0 0	3 4 0	1 0 at Re. 1-12	1 12 0	5 0 0	
16	Ditto ...	Ditto	...	...	3 10	1 0 0	3 4 0	1½ 0 at Re. 1-12	2 0 0	5 4 0	
22	Begumpore ...	Ditto	...	...	7 0	0 1¼ 0	6 2 0	1 0 at Rs. 2-8	2 8 0	8 10 0	
24	Roghoonathpur ...	Ditto	...	...	8 0	0 15 0	7 8 0	1 0 at Rs. 3	3 0 0	10 8 0	
25	Ditto ...	Ditto	...	...	6 0	0 15 0	5 10 0	0 14 at Rs. 3	3 0 0	8 10 0	
28	Banshye	Ditto	...	...	6 20	0 14 0	5 10 0	1¼ 0 at Rs 3	4 8 0	10 2 0	
29	Ditto	Ditto	...	...	3 30	0 14 0	3 4 6	1 0 at Rs. 2	2 0 0	5 4 6	

XI.—*West of Saraswati outturn of Paddy.*

Outturn of paddy per bigha west of the Saraswati.

Number.	Village.	Class	Paddy. Local. M s.	Paddy. Local. Rs. a.p	Paddy. Standard. M. s.	Paddy. Standard. Rs. a.p	Straw. Local. Kahan Ps	Straw. Local. Rs. a.p	Straw. Standard. Kahan. Ps.	Straw. Standard. Rs. a.p	Total. Local. Rs. a.p	Total. Standard. Rs. a.p	Remarks.
1	Baksha ...	Awal ...	8 10 at Rs.	0-14 7 5 0	6 24 at Rs	5 11 0	1 0 at Rs.	4-8 4 8	0 13 Rs	3 10 6	11 13 0	9 6 6	Paddy weighed. Straw estimated
2	Khoragoree ...	Do. ..	8 15 ,,	0 14 6 2 0	5 24 ,,	4 14 0	0 12 ,,	4-8 3 0	0 9½ ,,	2 10 0	10 10 0	7 8 0	Do. Do
3	Duttpur ...	Do. ...	7 0 ,,	0 14 6 2 0	5 24 ,,	4 14 0	1 0 ,,	4 4 0	0 13 ,,	3 4 0	10 4 0	8 3 0	Do. Do.
4	Jonardunpur	Doim	7 7 ,,	0 14 6 4 0	5 30 ,,	4 15 0	1 0 ,,	4 4 0	0 13 ,,	3 4 0	10 12 0	8 11 6	Do. Do.
5	Ditto .	Awal ...	7 35 ,,	0 14 6 12 0	6 12 ,,	5 7 6	1 0 ,,	4 4 0	0 13 ,,	3 4 0	11 4 0	8 11 6	Do. Do.
6	Digaldenga ..	Doim ...	10 0 ,,	1 0 10 0 0	8 0 ,,	8 0 0	1 0 ,,	4 4 0	0 13 ,,	3 4 0	14 0 0	11 4 0	Do Do
7	Gungadhurpur ...	Awal ...	1 29 ,,	1 0 11 12 0	9 15 ,,	9 6 0	1 0 ,,	4 4 0	0 13 ,,	3 4 0	15 12 0	12 10 0	Do. Do.
8	Koomargoree	Do. ...	6 20 ,,	0 12 5 0 0	5 8 ,,	3 14 0	3 ¼ ,,	4 3 0	0 9½ ,,	2 6 0	8 0 0	6 4 0	stated
9	Ditto ...	Do.	8 35 ,,	0 12 6 10 0	7 4 ,,	5 5 0	1 0 ,,	4 4 0	0 13 ,,	3 4 0	10 10 0	8 12 0	W E
10	Monirampur ...	Do. ...	10 0 ,,	0 12 7 8 0	8 0 ,,	6 0 0	1 0 ,,	4 4 0	0 13 ,,	3 4 0	11 8 0	9 4 0	W E.
11	Madhubpur ...	Do. ...	8 25 ,,	0 12 6 7 0	6 34 ,,	5 2 6	1 0 ,,	4 4 0	0 13 ,,	3 4 0	10 7 0	8 10 6	W E.
12	Krishtopur ...	Do.	9 24 ,,	0 12 7 2 0	7 27 ,,	5 12 3	1 0 ,,	3-8 3 8	0 13 ,,	2 15 0	10 10 0	8 11 6	W E.
13	Ditto ...	Do. ...	8 0 ,,	0 12 6 0 0	6 16 ,,	4 13 0	1 0 ,,	3-4 3 4	0 13 ,,	2 10 0	9 4 0	7 7 0	Stated
14	Ditto ..	Do. ..	9 0 ,,	0 12 6 12 0	7 8 ,,	5 6 0	1 0 ,,	3-4 3 4	0 13 ,,	2 10 0	10 0 0	8 0 0	W. E.
15	Kristorampur .	Do ..	8 12 ,,	0 14 7 4 6	6 26 ,,	4 13 0	1 0 ,,	3 3 0	0 13 ,,	2 7 0	10 4 6	8 4 0	W. E
16	Ditto ...	D im ..	4 20 ,,	0 14 4 0 0	3 24 ,,	3 3 0	1 0 ,,	3 3 0	9 13 ,,	2 7 0	7 0 0	5 10 0	Stated
17	Ditto ...	Awal ..	9 27 ,,	0 14 8 8 0	7 30 ,,	6 12 6	1 0 ,,	3 3 0	0 13 ,,	2 7 0	11 8 0	9 3 6	W E.
18	Ditto ...	Doim ...	4 3 ,,	0 14 3 8 0	3 10 ,,	2 13 0	0 12 ,,	3 2 4	0 9½ ,,	1 12 0	5 12 0	4 9 0	W. E
19	Kristo Chuck ...	Awal ...	7 20 ,,	0 14 6 8 0	6 0 ,,	5 4 0	1 0 ,,	3 3 0	0 13 ,,	2 7 0	9 8 0	7 11 0	Stated
20	Ditto ..	Seyam .	7 20 ,,	0 14 6 8 0	6 0 ,,	5 4 0					6 8 0	5 4 0	Do
21	Ditto ...	Do. ...	8 30 ,,	0 14 7 10 0	7 0 ,,	6 2 0					7 10 0	6 2 0	W
22	Kolachora ...	Awal ...	6 0 ,,	0 14 5 4 0	4 32 ,,	4 2 6	..		.. ..		5 4 0	4 2 6	Stated.
23	Ditto ...	Do. ...	8 0 ,,	0 14 7 0 0	6 16 ,,	5 9 0	..		... ..		7 0 0	5 9 0	W.
24	Ditto ...	Doim ...	4 5 ,,	0 14 3 10 0	3 12 ,,	2 4 6	.. .		. .		3 10 0	2 14 6	W.
25	Benipur ...	Sali ...	2 30 ,,	0 14 2 6 6	2 8 ,,	1 13 6	.		.		2 6 6	1 13 6	W.
26	Pyragacha ..	Doim ...	8 0 ,,	0 14 7 0 0	6 16 ,,	5 9 0					7 0 0	5 9 0	W
27	Goralgacha ...	Do ...	6 10 ,,	1 0 6 4 0	5 0 ,,	4 2 0	0 12 ,,	2-8 1 14	0 9½ ,,	1 7 0	8 2 0	6 7 0	W E.
28	Ditto ..	Awal ...	5 30 ,,	1 0 5 12 0	4 24 ,,	4 9 6	1 0 ,,	3-3 3 3	0 13 ,,	2 7 0	8 15 0	7 0 6	Paddy weigh d Straw estimated.
29	Makhalpara ...	Doim ...	7 0 ,,	1 0 7 0 0	5 24 ,,	5 9 6	0 12 ,,	2 1 8	0 9½ ,,	1 3 0	8 8 0	6 12 6	Do stated
30	Ditto ...	Awal ...	9 0 ,,	1 0 9 0 0	7 8 ,,	7 3 0	1 0 ,,	2 2 0	0 13 ,,	1 10 0	11 0 0	8 13 0	Stated.
31	Boruhatty ...	Do. ...	9 0 ,,	1 0 9 0 0	7 8 ,,	7 3 0	1 0 ,,	2 12 2 12	0 13 ,,	2 4 0	11 12 0	9 5 0	Do.
32	Ditto ...	Do. ...	7 26 ,,	1 0 7 10 0	6 5 ,,	6 2 0	1 0 ,,	3 3 0	0 13 ,,	2 7 0	10 10 0	8 9 0	W. estimated.
33	Joka ..	Do. ...	9 0 ,,	0 12 6 12 0	7 8 ,,	6 3 0		... .		..	6 12 0	5 6 0	Stated.
34	Do. .	Doim ...	4 15 ,,	0 12 3 4 6	3 20 ,,	2 10 0		... ..		..	3 4 6	2 10 0	W.
35	Bamundanga ...	Awal ..	7 26 ,,	0 12 5 11 6	6 5 ,,	4 9 6		.. .		.....	5 11 6	4 9 6	W

XI. - *West of Saraswati outturn of Paddy*—concluded.

Number.	Village.	Class.	Paddy. Local. M. S.	Paddy. Local. Rs. A. P.	Paddy. Standard. M. S.	Paddy. Standard. Rs. A. P.	Straw. Local. Kahan Ps.	Straw. Local. Rs. A. P.	Straw. Standard. Kahan Ps.	Straw. Standard. Rs. A. P.	Total. Local. Rs. A. P.	Total. Standard. Rs. A. P.	Remarks.
36	Aujoodhya ...	Awal ...	5 0	Rs. 0 12 3 12 0	4 0	Rs. 3 0 0	0 10	Rs. 2-12 1 13	0 8	„ 1 6 0	5 9 0	4 6 0	Stated.
37	Ditto ...	Do. ...	5 0	„ 0 12 3 12 0	4 0	„ 3 0 0	0 10	„ 2-12 1 13	0 8	„ 1 6 0	5 9 0	4 6 0	W. E.
38	Ditto ...	Doim ...	4 0	„ 0 12 3 0 0	3 8	„ 2 6 0	.....	.....	.....	.....	3 0 0	2 6 0	Stated.
39	Ditto ...	Seyam ...	2 0	„ 0 12 1 8 0	1 24	„ 1 2 0	.....	.....	.....	.....	1 8 0	1 2 0	Do.
40	Makhalpara ...	Do. ...	4 0	„ 0 12 3 0 0	3 8	„ 2 6 0	.....	.....	.....	.....	3 0 0	2 6 0	W.
41	Khanpur ...	Doim ...	6 5	„ 0 12 4 10 0	4 36	„ 3 10 6	0 8	„ 2-8 1 4	0 6½	„ 1 1 0	5 14 0	4 11 6	W. E.
42	Ditto ...	Do. ...	5 35	„ 0 12 4 7 0	4 28	„ 3 8 0	1 0	„ 2-8 2 8	0 13	„ 2 1 0	6 15 0	5 9 0	W. E.
43	Ekl·kee ...	Do. ...	6 0	„ 0 13 5 0 0	4 32	„ 3 14 6	0 10	„ 3 2 8	0 8	„ 1 4 0	7 8 0	5 2 6	Stated.
44	Ditto ...	Do. ...	6 2	„ 0 13 5 0 0	4 34	„ 3 15 0	1 0	„ 3 3 0	0 13	„ 2 7 0	8 0 0	6 6 0	W. E.
45	Ditto ...	Awal ...	8 0	„ 0 13 6 8 0	6 16	„ 5 3 0	1 0	„ 3 3 0	0 13	„ 2 7 0	9 8 0	7 10 0	W. E.
46	Koomirmora ...	Bir awal	8 0	„ 1 0 8 0 0	6 16	„ 6 6 0	1 0	„ 3 3 0	0 13	„ 2 7 0	11 0 0	8 13 0	Stated.
47	Ditto ...	Awal ...	8 0	„ 0 14 7 0 0	6 16	„ 5 9 6	1 0	„ 1-4 1 4	0 13	„ 1 0 0	8 4 0	6 9 6	Do.
48	Ditto ...	Doim ...	6 20	„ 0 14 5 11 0	5 8	„ 4 8 6	.....	„ ... 0 8	.....	„ 0 6 6	6 3 0	4 15 0	Do.
49	Ditto ...	Seyum and chohoram.	6 0	„ 0 14 5 4 0	4 32	„ 4 4 0	.....	.....	.....	.....	5 4 0	4 4 0	Do.
50	Ditto ...	Awal ...	9 11	„ 0 14 8 0 0	7 17	„ 6 8 0	1 0	„ 1-4 1 4	0 13	„ 1 0 0	9 4 0	7 8 0	W. E.
51	Ditto ...	Do. ...	9 15	„ 0 14 8 2 0	7 20	„ 6 9 0	1 0	„ 1-4 1 4	0 13	„ 1 0 0	9 6 0	7 9 0	W. E.
52	Ditto ...	Doim ...	3 0	„ 0 14 2 10 0	2 16	„ 2 1 6	.....	„ ... 0 8	.....	„ 0 6 6	3 2 0	2 8 0	W. E.
53	Ditto ...	Do. ...	4 0	„ 0 12 3 0 0	3 8	„ 2 6 0	.....	„ ... 0 8	.....	„ 0 6 6	3 8 0	2 12 6	Stated.
54	Romanathpur ...	Awal ...	7 20	„ 0 12 5 10 0	6 0	„ 4 8 0	1 0	„ ... 3 0	0 13	„ 2 7 0	8 10 0	6 15 0	Do.
55	Ditto ...	Doim ...	6 20	„ 0 12 4 14 0	5 8	„ 3 14 0	1 0	„ ... 1 0	0 8½	„ 0 13 0	5 14 0	4 11 0	Do.
56	Ditto ...	Seyum and chohoram.	5 0	„ 0 12 3 12 0	4 0	„ 3 0 0	.....	.....	.....	.....	3 12 0	3 0 0	Do.
57	Ditto ...	Awal ...	5 7	„ 0 12 4 0 0	4 5	„ 3 1 6	1 0	„ ... 3 0	0 13	„ 2 7 0	7 0 0	5 8 6	Paddy weighed. Straw estimated.
58	Ditto ...	Doim ...	4 0	„ 0 12 3 0 0	3 8	„ 2 6 0	1 0	„ ... 1 0	0 13	„ 0 13 0	4 0 0	3 3 0	Do. Do.
59	Gokoolpur ...	Awal ...	5 20	„ 0 13 4 8 0	4 16	„ 3 6 0	0 13	„ 3 2 8	0 10½	„ 2 0 0	7 0 0	5 6 0	Stated.
60	Ditto ...	Doim ...	4 20	„ 0 13 3 11 0	3 24	„ 2 15 0	.....	.....	.....	.....	3 11 0	2 15 0	Do.
61	Ditto ...	Seyum and chohoram.	3 20	„ 0 13 3 0 0	2 32	„ 2 4 6	.....	.....	.....	.....	3 0 0	2 4 6	Do.
62	Ditto ...	Awal ...	5 16	„ 0 13 4 8 0	4 13	„ 3 8 0	0 14	„ 3 2 8	0 11	„ 2 1 0	7 0 0	5 9 0	W. E.
63	Chunditollah ...	Do. ...	7 20	„ 0 14 6 9 0	6 0	„ 5 4 0	0 10	„ ... 1 2	0 8	„ 0 14 6	7 11 0	6 2 6	Stated.
64	Ditto ...	Do. ...	5 0	„ 0 14 4 6 0	4 0	„ 3 8 0	0 10	„ ... 1 2	0 8	„ 0 14 6	5 8 0	4 6 6	W. E.
65	Jonai ...	Do. ...	7 20	„ 0 14 6 9 0	6 0	„ 5 4 0	1 0	„ ... 3 0	0 13	„ 2 7 0	9 9 0	7 11 0	Stated.
66	Do. ...	Doim ...	7 10	„ 0 14 6 12 0	5 32	„ 5 1 6	1 0	„ ... 3 0	0 13	„ 2 7 0	9 12 0	7 8 6	Do.
67	Do. ...	Awal ...	7 37	„ 0 14 7 0 0	6 14	„ 5 9 3	1 0	„ ... 3 0	0 13	„ 2 7 0	10 0 0	8 0 3	W. E.
68	Do. ...	Doim ...	6 10	„ 0 14 5 7 0	5 0	„ 4 6 0	1 0	„ ... 3 0	0 13	„ 2 7 0	8 7 0	6 15 0	W. E.
69	Do. ...	Seyum ...	5 20	„ 0 14 4 13 0	4 16	„ 3 13 0	0 10	„ 2 1 4	0 8	„ 1 0 0	6 1 0	4 13 0	Stated.
70	Do. ...	Chohoram	5 0	„ 0 14 4 6 0	4 0	„ 3 8 0	.....	.....	.....	.....	4 6 0	3 8 0	Do.

XII.—*Experiments west of Saraswati.*

1	2	3	4				5			6		7	
			Information as to quantity of Produce.				Information as to Selling Price of Produce.			Straw.			
			a Area of crop cut for the experiment.		*b*	*c*	*a*	*b*	*c*	1	2		
Serial number of experiment.	District, Pergunnah, or Thannah, and Village.	Description of Crop.	1 In the unit which was actually used in the calculation of the experiment.	2 In square yards.	Weight of paddy threshed out in seers of 80 tolahs' weight.	Weight of paddy per bigha of 14,400 square feet obtained by calculation from columns 4 (*a*), 2, and 4 (*b*).	Rate at which paddy of the last crop was sold to the merchants at the cheapest time of the year by the ryots who produced it, expressed in local unit of weight per rupee.	The same expressed in seers of 80 tolahs' weight per rupee.	Rate per rupee which the officer making the enquiries considers may fairly be taken as the average price at which paddy is ordinarily sold by the ryots to the merchants at the cheapest time of the year.	Quantity of straw.	Value.	Total.	Remarks.
	West of Saraswati. *District Hooghly, Thanna Chunditollah.*	Haymuntic Paddy.			Srs. c.	Mds. s.	Rs. a.	Value. Rs. a.	Mds. s.	K. p.	Rs. a.	Rs. a. p.	Rs. a. p.	
1	Baksha	Awal ...	6′×30′	20	4½ 0	6 24	0 14	5 11	1 5½	1 0	at 4 0	4 0 0	9 11 0	Cut. Dryage 10 seers per maund.
2	Khonragoree	Do. ...	25 bundles	40	8 6	6 28	0 14	5 12	1 5½	1 0	„ 4 8	4 8 0	10 4 0	None ready to cut but this. 20 bundles were on 4 cottahs 1½ chittacks. Dryage 6 seers per maund.
3	Duttpore	Do. ...	10′×30′	33½	6½ 0	5 24	0 14	4 14	45 ¼	0 12	„ 4 8	3 6 0	8 4 0	Ten seers dryage. Cut.
4	Jonardunpur	Doim ...	16½ bundles	26⅔	4½ 0	5 30	0 14	4 15	45 ¼	1 0	„ 4 0	4 0 0	8 15 0	No doim available but this which was lying cut. Rest unripe. Dryage 6 seers.
5	Ditto	Awal ...	10′×30′	33½	7 0	6 12	0 14	5 7½	45 ¼	1 0	„ 4 0	4 0 0	9 7½ 0	Cut. Dryage 10 seers.

XII.—*Experiments west of Saraswati*—continued.

1	2	3	4				5			6		7	8
			Information as to quantity of Produce.				Information as to selling Price of Produce.			Straw.			
			a Area of crop cut for the experiment.		*b*	*c*	*a*	*b*	*c*	1	2		
Serial number of experiment.	District, Pergunnah, or Thannah, and Village.	Description of Crop.	1 In the unit which was actually used in the calculation of the experiment.	2 In square yards.	Weight of paddy threshed out in seers of 80 tolahs' weight.	Weight of paddy per bigha of 14,400 square feet obtained by calculation from columns 4 (*a*), 2, and 4 (*b*).	Rate at which paddy of the last crop was sold to the merchants at the cheapest time of the year by the ryots who produced it, expressed in local unit of weight per rupee.	The same expressed in seers of 80 tolahs' weight per rupee.	Rate per rupee which the officer making the enquiries considers may fairly be taken as the average price at which paddy is ordinarily sold by the ryots to the merchants at the cheapest time of the year.	Quantity of straw.	Value.	Total.	Remarks.
	West of Saraswati—*contd.* *District Hooghly, Thannah Chunditollah*—contd.	Haymuntic Paddy—*contd.*					Value.						
					M. S. C.	Mds. S.	Rs. A.	Rs. A.	Mds. S.	K. P. Rs. A	Rs. A. P.	Rs. A. P.	
6	Digulgengy	Doim ...	31 bundles	40	0 9 13	8 0	1 0	8 0	1 0	1 0 at 4 0	4 0 0	12 0 0	No paddy uncut here. 136 bundles were on 2 cottahs 11 chittacks. Dryage 5 seers.
7	Gungadhurpur	Awal ...	23 „	30	0 8 3	9 15	1 0	9 6	1 0	1 0 „ 4 0	4 0 0	13 6 0	No labour available. 390 bundles on 5 cottahs 7½ chittacks (standard.) Dryage 5 seers.
9	Koomragoree	Do. ...	10′×30′	35½	0 6¾ 0	5 8	0 12	5 5	1 13½	1 0 „ 4 0	4 0 0	9 5 0	Cut. Dryage 5 seers.
10	Monirampore	Do. ...	21 bundles	25	0 5 11	8 0	0 12	6 0	1 13½	1 0 „ 4 0	4 0 0	10 0 0	No paddy uncut. 251 bundles on 3 cottahs 11½ chittacks. Dryage 5 seers.
11	Madhubpore	Do. ...	14 „	20	0 3 15	6 34	0 12	5 2½	1 13½	1 0 „ 4 0	4 0 0	9 2½ 0	No paddy uncut. 373 bundles on 6 cottahs 12½ chittacks. Dryage 5 seers.

12	Kishtopur	Do. ...	30′ × 10′	33⅓	0	6	8½	7	27	0	12	5	12½	1	13½	1	0 „ 3	8	3	8	0	9	4½	0	Cut. Dryage 3 seers. Kept and dried partly before weighment.
14	Ditto	Do. ...	20 bundles	20	0	5½	0	7	8	0	12	5	6	1	13½	1	0 „ 3	4	3	4	0	8	10	0	Ground wet. This being cut. 220 bundles on 2 cottahs 12 chittacks. Dryage 10 seers.
15	Kristorampur	Do. ...	30′ × 12′	40	0	8	3	6	26	0	14	4	13	1	5⅔	1	0 „ 3	0	3	0	0	5	13	0	Cut. Dryage 7½ seers.
17	Ditto	Do. ...	30′ × 10′	33⅓	0	7	14	7	30	0	14	6	12½	1	5⅔	1	0 „ 3	0	3	0	0	7	12½	0	Ditto ditto.
18	Ditto	Doim ...	30′ × 10′	33⅓	0	3	10	3	10	0	14	2	13	1	5⅔	0	12 „ 3	0	2	4	0	3	9	0	Cut in mud and water. Dryage 10 seers.
21	Krishto chuck	Seyum ...	30′ × 10′	33⅓	0	7⅔	0	7	0	0	14	6	2	1	5⅔		.....			.....		6	2	0	Cut in deep water. Straw rots. Dried in sun and weighed. Dryage 10 seers.
23	Kolachora	Awal ...	30′ × 12′	40	0	10	11	6	16	0	14	5	9	1	5⅔		.....			.....		5	9	0	Cut in deep water. No straw. Dryage 16 seers. Badly threshed.
24	Ditto	Doim ...	30′ × 10′	33⅓	6	29	0	3	12	0	14	2	14⅓	1	5⅔		.....			.....		2	14½	0	Cut in water. No straw. Dryage and dirt half, on 20 seers per maund. Badly threshed.
25	Benipur	Sali ...	12′ × 30′	40	0	2½	0	2	8	0	14	1	13½	1	5⅔		.....			.....		1	13½	0	Cut. Dryage 5 seers. Straw useless.
26	Pyragacha	Doim ...	30′ × 10′	33⅓	0	8½	0	6	16	0	14	5	9	1	5⅔		.....			.....		5	9	0	Dryage 15 seers. Cut wet. No straw.
27	Gorulgacha	Do. ...	30′ × 10′	33⅓	0	6	9	5	0	1	0	5	0	1	0	0	12 „ 2	8	1	14	0	6	14	0	Cut in water. Dryage 15 seers.
28	Ditto	Awal ...	30′ × 10′	33⅓	0	4⅔	0	4	24	1	0	4	9½	1	0	1	0 „ 3	0	3	0	0	7	9½	0	Cut. Dryage 8 seers.
29	Makalparah	Doim ...	30′ × 10′	33⅓	0	9	6	5	24	1	0	5	9½	1	0	0	12 „ 2	0	1	8	0	7	1½	0	Cut wet. Dryage and dirt 20 seers per maund.
32	Borizhatty	Awal ...	30′ × 12′	40	0	8	3	6	5	1	0	6	2	1	0	1	0 „ 3	0	3	0	0	9	2	0	Cut. Dryage 10 seers.
34	Joka	Doim ...	30′ × 10′	33⅓	0	4	10	3	20	0	12	2	10	1	13⅓		.....			.....		2	10	0	Cut wet. Straw useless. Dryage and dirt 15 seers.
35	Bamundanga	Awal ...	30′ × 10′	33⅓	0	10	7	6	5	0	12	4	9½	1	13⅓		.....			.....		4	9½	0	Cut in water. Straw useless. dryage on 20 seers per maund.
37	Aujoodhya	Do ...	12′ × 30′	40	0	7	6	4	0	0	12	3	0	1	13⅓	0	10 „ 2	12	1	11	6	4	11	6	Cut in water. Dryage 20 seers per maund.
40	Makhalparah	Seyum ...	12′ × 30′	40	0	4½	0	3	8	0	12	2	6	1	13⅓		.....			.....		2	6	0	Cut dry. Straw said to be useless. Dryage 10 seers.
41	Khanpur	Doim ...	12′ × 30′	40	0	6	7	4	36	0	12	3	10½	1	13⅓	0	8 „ 2	8	1	4	0	4	14½	0	Cut. Badly threshed. Dryage 12 seers.
42	Ditto	Do. ...	12′ × 30′	40	0	7	8	4	28	0	12	3	8	1	13⅓	1	0 „ 2	8	2	8	0	6	0	0	Cut wet. Badly threshed. Dryage and dirt 15 seers.
44	Ekloki	Awal ...	12′ × 30′	40	0	6	1	4	34	0	13	3	15	1	9½	1	0 „ 3	0	3	0	0	6	15	0	Cut. Dryage 8 seers.
45	Ditto	Do. ...	12′ × 30′	40	0	8	10	6	16	0	13	5	3	1	9½	1	0 „ 3	0	3	0	0	8	3	0	Cut. Dryage 10 seers per maund.
50	Koomirmorah	Do. ...	30′ × 10′	33⅓	0	9	0	7	17	0	14	6	8	1	5⅔	1	0 „ 1	4	1	4	0	7	12	0	Cut. Dryage 12½ seers.
51	Ditto	Do. ...	30′ × 10′	33⅓	0	10	0	7	20	0	14	6	9	1	5⅔	1	0 „ 1	4	1	4	0	8	13	0	Cut wet Dryage 15 seers.
52	Ditto	Doim ...	30′ × 10′	33⅓	0	4	2	2	16	0	14	2	1½	1	5⅔		.....			.....		2	1½	0	Cut very wet. Threshed badly. Dryage 20 seers per maund.
57	Romanathpur	Awal ...	12′ × 30′	40	0	4⅔	0	4	5	0	12	3	1½	1	13⅓	1	0 „ 3	0	3	0	0	6	1½	0	Cut. Dryage 5 seers per maund.
58	Ditto	Doim ...	30′ × 10′	33⅓	0	5	6	3	8	0	12	2	4	1	13⅓	1	0 „ 1	0	1	0	0	3	4	0	Cut in water. Dryage and dirt 20 seers per maund.
62	Gokulpur	Awal ...	30′ × 12′	40	0	4	15	4	13	0	13	3	8	1	9½	0	14 „ 3	0	2	10	0	6	2	0	Cut. Dryage 5 seers per maund.
64	Chunditollah	Do. ...	30′ × 10′	33⅓	0	4½	0	4	0	0	14	3	8	1	5⅔	0	10 „ 1	2	0	11	3	4	3	3	Cut damp. Nearly the last. Dryage 10 seers.
67	Jonai	Do. ...	30′ × 10′	40	0	7½	0	6	14	0	14	5	9½	1	5⅔	1	0 „ 3	0	3	0	0	8	9½	0	Cut. Dryage 5 seers.
68	Ditto	Doim ...	12′ × 30′	40	0	6½	0	5	0	0	14	4	6	1	5⅔	1	0 „ 3	0	3	0	0	7	6	0	Cut. Dryage 8 seers.

XLII.—*Outturn of Paddy west of Saraswati from enquiry.*

Stated outturn of paddy per bigha west of Saraswati

1	2	3	4				5		6		7	
			Information as to Quantity of Produce.				Information as to Selling Price of Produce.		Straw.			
			a Area of crop cut for the experiment		*b*	*c*	*a*	*b*	1	2		
Serial number of experiment.	District, Pergunnah, Thanah, and Village	Description of Crop.	1 In the unit which was actually used in the calculation of the experiment.	2 In square yards.	Weight of paddy threshed out in sears of 80 tolahs' weight.	Weight of paddy per bigha of 14,400 square feet, obtained by calculation from columns 4 (*a*) 2 and 4 (*b*) 1.	Rate at which paddy of the last crop was sold to the merchants at the cheapest time of the year by the ryots who produced it, expressed in local unit of weight per rupee	Value.	Quantity of straw	Value.	Total value.	Remarks.
	Stated.				S. C.	Mds. S.	Rs. A. P	Rs. A.	K. P. Rs. A.	Rs. A. P.	Rs. A. P.	
	Hooghly, Thanah Chunditolla.											
8	Koomragoree		.....	...	.....	6 20	0 12 0	4 12	1 0 at 4 0	3 0 0	7 12 0	
13	Krishtopur		.....	...	.....	8 0	0 12 0	6 0	1 0 at 3 4	3 4 0	9 4 0	
16	Krishtorampur		.....	...	.....	4 20	0 14 0	3 15	1 0 at 3 0	3 0 0	6 15 0	
19	Krishto Chuck		.....	...	.. ...	7 20	0 14 0	6 9	1 0 at 3 0	3 0 0	9 9 0	
20	Ditto		.....	...	.....	7 20	0 14 0	6 9	.....	.....	6 9 0	
22	Kolachora		.. ...	...	.. ...	6 0	0 14 0	5 4	.. .	... ..	5 4 0	
30	Makhalparah		..	...	.....	9 0	1 0 0	9 0	1 0 at 2 0	2 0 0	11 0 0	This was made according to the statments made by ryots and zemindars locally.
31	Bortuatly		.....	...	.....	9 0	1 0 0	9 0	1 0 at 2 12	2 12 0	11 12 0	
33	Joka		.....	...	.....	9 0	0 12 0	6 12	.....	...	6 12 0	

| | | |

XIV.—*Jute outturn.*

Outturn of jute east of the Saraswati per bigha.

Number.	Village.	Quantity	Rate.	Value.	Remarks.
		Mds. s. c.	Rs. a p.	Rs. a. p.	
1	Kalipore	2 30 0	2 14 0	8 0 0	
2	Monberh	4 0 0	2 14 0	11 8 0	
3	Begumpore	3 0 0	2 12 0	8 4 0	
4	Adan	3 0 0	2 12 0	12 6 0	
5	Roghonathpore	4 20 0	2 14 0	13 0 0	
6	Monohurpore	4 0 0	3 0 0=Rs. 12; pakatee, 8 bundles Re 1.	13 0 0	
7	Ditto	2 20 0	3 0 0=Rs. 7-8; pakatee, bundles 8, Re. 1.	8 8 0	
8	Basye	5 0 0	3 0 0	15 0 0	
9	Boro Boira	3 0 0	3 0 0	9 0 0	

Outturn of jute west of Saraswati.

Number.	Village.	Quantity and Rate.		Value.	
		Local.	Standard.	Local.	Standard.
		Mds. s. Rs. a.	Mds. s. Rs. a.	Rs. a. p	Rs. a. p.
1	Jonai	4 0 at 3 0	3 8 at 3 0	12 0 0	9 10 0
2	Kistorampore	3 20 „ 2 14	2 32 „ 2 14	10 1 0	8 0 0
3	Kolachora	3 20 „ 2 12	2 32 „ 2 12	9 10 0	7 11 0
4	Pyragacha with manure .	3 20 „ 3 0	4 32 „ 3 0	18 0 0	14 6 0
5	Ditto without	4 0 „ 3 0	3 8 „ 3 0	12 0 0	9 10 0
6	Gorulgacha	4 0 „ 3 0	3 8 „ 3 0	12 0 0	9 10 0
7	Bamondanga	4 0 „ 2 14	3 8 „ 2 14	11 8 0	9 3 6
8	Ojudhya	4 20 „ 3 0	3 24 „ 3 0	13 8 0	10 13 0
9	Eklokee	3 20 „ 2 13	2 32 „ 2 13	9 10 0	7 11 6
10	Koomirmorah	4 20 „ 2 14	3 24 „ 2 14	12 15 0	10 5 6
11	Romanathpur	4 20 „ 2 12	3 24 „ 2 12	12 6 0	9 14 6
12	Chunditola	...	...	... ...	
13	Gungadhurpur	5 0 at 2 13	4 0 at 2 13	14 1 0	11 4 0

XV.—*Kolai outturn.*

No.	Village.	Bulk.		Rate.	Value.		Remarks.
		Local.	Standard.		Local.	Standard.	
		Ms. s. ch.	Ms. s. ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Jonai	2 0 0	1 24 0	2 8 0	5 0 0	4 0 0	
2	Monberh ...	2 0 0	2 0 0	1 8 0	3 0 0	3 0 0	
3	Krishtorampur ...	1 20 0	1 8 0	1 8 0	2 4 0	1 13 0	
4	Kolachora ...	2 0 0	1 24 0	1 8 0	3 0 0	2 5 6	
5	Pyragacha	2 0 0	1 24 0	2 0 0	4 0 0	3 3 0	
6	Begumpore	1 20 0	1 20 0	1 8 0	2 4 0	2 4 0	
7	Adan	1 20 0	1 20 0	2 0 0	3 0 0	3 0 0	
8	Bamundanga	2 0 0	1 24 0	2 8 0	5 0 0	4 0 0	
9	Aujoodhya	4 0 0	3 8 0	1 12 0	7 0 0	5 9 6	
10	Eklokee ...	3 0 0	2 16 0	2 0 0	6 0 0	4 13 0	
11	Koomirmora ...	2 0 0	1 24 0	2 0 0	4 0 0	3 3 0	
12	Bansye	1 20 0	1 20 0	2 0 0	3 0 0	3 0 0	
13	Chunditolla ...	2 20 0	2 0 0	2 0 0	5 0 0	4 0 0	

XVI.—*Potatoes, outturn and abstract of cultivation.*

Patatoes outturn.

No.	Village.	Per Local Bigha.			Per Standard Bigha.		
		Quantity.	Rate.	Value.	Quantity.	Rate.	Value.
		Mds.	Rs. A. P.	Rs. A. P.	Mds.	Rs. A. P.	Rs. A. P.
	Kistorampur	36	1 8 0	54 0 0	29	1 8 0	43 8 0
	Begumpur (Country)	40	1 2 0	45 0 0	40	1 2 0	45 0 0
	Ditto (Bombay)	60	1 2 0	67 12 0	60	1 2 0	67 12 9
	Adan (Country)	30	1 2 0	33 12 0	30	1 2 0	33 12 0
	Do. (Bombay)	40	1 8 0	60 0 0	40	1 8 0	60 0 0
	Kumirmorah (ditto)	40	2 0 0	80 0 0	32	2 0 0	64 0 0
	Ditto (Country)	40	1 8 0	60 0 0	32	1 8 0	48 0 0
	Monirampur	45	1 6 0	62 0 0	36	1 6 0	50 8 0
	Gungadhurpur ryots	20 + 5 at Rs. 0-4	3 8 0	76 4 0	16 4	3 8 0 1 4 0	61 0 0
	Ditto naib	6	2 0 0	120 0 0	48	2 0 0	96 0 0

Abstract of cost of production.

Village.	Seed.		Manure.		Ploughs.	Labour
	Mds. S.	Rs. A. P.	Mds. lb.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Kistorampur (Bombay)	6 0 ...	42 0 0	7 0 ...	10 8 0	8 ... ... 2 10 6	74 ... ... 18 8 0
Ditto (Country)	1 20 ...	30 0 0	5 0 ...	7 8 0	8 ... ... 2 10 6	74 ... ... 18 8 0
Jagannathbati (Bombay)	6 0 ...	48 0 0	6 0 ...	8 0 0	10 ... ... 3 5 3	61 ... ... 15 4 0
Ditto (Country)	1 0 ...	22 0 0	6 0 ...	8 1 0	10 ... ... 3 5 3	61 ... ... 15 4 0
Begumpur (Bombay)	6 0 ...	36 0 0	6 50 ...	9 8 0	12 ... ... 4 0 0	78 ... ... 24 10 0
Ditto (Country)	2 0 ...	40 0 0	6 50 ...	9 8 0	12 ... ... 4 0 0	78 ... ... 24 10 0
Adan (Bombay)	6 0 ...	45 0 0	7 50 ...	11 5 3	8 ... ... 4 0 0	60 ... ... 15 0 0
Do. (Country)	2 0 ...	24 0 0	7 50 ...	11 5 3	8 ... ... 4 0 0	60 ... ... 15 0 0
Kumirmorah (Bombay)	6 0 ...	40 0 0	4 0 ...	5 8 0	8 ... ... 2 12 0	58½ 12 13 0
Ditto (Country)	2 0 ...	32 0 0	4 0 ...	5 8 0	8 ... ... 2 12 0	58½ 12 13 0
Monirampur (Bombay)	8 0 ...	48 0 0	8 0 ...	10 0 0	12 ... ... 4 8 0	103 ... ... 29 0 0
Ditto (Country)	2 0 ...	32 0 0	8 0 ...	10 0 0	12 ... ... 4 8 0	103 ... ... 29 0 0
Gungadhurpur naib (Bombay)	5 0 ...	25 0 0	5 0 ...	6 4 0	5 ... ... 1 9 0	60 ... ... 15 15 0
Ditto (Country)	1 10 ...	20 0 0	5 0 ...	6 4 0	5 ... ... 1 9 0	60 ... ... 15 15 0
Ditto ryot (Bombay)	7 0 ...	42 0 0	8 0 ...	10 0 0	12 ... ... 4 11 0	105 ... ... 29 8 0
Ditto do. (Country)	2 10 ...	36 0 0	8 0 ...	10 0 0	12 ... ... 4 11 0	105 ... ... 29 8 0

XVII.—*Table showing the purchase of* PADDY *made by the Mahajuns or Traders per maund.*

NAME OF MAHAJUN.	Year.	Baisack.	Joistho.	Assar.	Shraban.	Bhadro.	Assin.	Kartick.	Aughran.	Pous.	Magha.	Falgoon.	Choitra.
		Rs.A.P.	Rs.A.P.	Rs.A.P.	Rs.A.P.	Rs.A.P.	Rs.A.P.	Rs.A.P.	Rs.A.P.	Rs.A.P.	Rs.A.P.	Rs.A.P.	Rs.A.P.
Bhuban Chunder Madak and others, of Jonai.	1284	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1285	.....	.....	.....	.....	.....	.....	.....	1 11 3	.....	.....	1 13 6	1 10 0
	1286	1 12 0	1 13 3	.....	.....	2 0 3	1 13 9	2 0 0	1 8 0	1 8 6	1 9 6	1 6 6	1 6 6
	1287	1 6 3	.....	1 3 9	1 3 6	.....	1 0 0	.....	0 14 6	0 14 0	0 13 3	0 12 0	0 13 3
	1288	0 13 0	0 13 0	0 12 9	.....	.....	1 0 9	1 0 0	0 11 9	0 13 6	0 13 0	0 13 0	0 13 0
Joggur Nath Dass, of Goral-gacha.	1284	1 0 6	1 9 3	1 7 9	1 4 9	1 11 6	1 12 9	1 6 3	1 2 3	1 9 6	1 7 9	1 7 9	1 14 6
	1285	2 1 0	2 0 6	2 0 0	2 1 9	2 5 9	2 3 3	2 1 0	1 10 3	2 0 6	1 11 0	1 11 6	2 0 6
	1286	1 15 0	1 13 9	2 2 0	2 4 0	2 0 9	2 0 9	1 13 0	1 14 9	1 9 0	1 7 3	1 7 0	2 2 9
	1287	1 4 6	1 4 6	1 5 0	1 4 3	1 0 6	0 13 3	1 1 6	0 13 0	0 13 3	0 13 9	0 13 0	0 12 6
	1288	0 11 9	0 11 9	0 11 6	1 1 6	1 2 9	1 0 0	0 13 3	0 11 6	0 11 6	0 13 9	0 12 0	0 12 9
Sonaton and Mohendro Nath Ghose, of Kolachara.	1284	1 0 6	1 4 0	1 6 6	1 7 6	1 10 6	2 2 9	.....	.....	.....	1 9 0	.....	1 14 0
	1285	2 3 9	2 1 0	2 4 3	2 2 6	2 7 9	.....	.....	.....	.....	.....	1 11 9	.....
	1286	1 13 3	2 1 0	2 2 9	2 2 6	2 4 6	1 15 3	1 13 6	.....	1 5 9	1 6 0	1 5 3	.....
	1287	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1288	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

RICE.

Bhoobun Madak, of Jonai.	1284	.....	.....	.....	.....	.....	... ..	.....	.....	.....	.....	... ..	.....
	1285	.....	... ..	.....	.....	.....	.....	... ..	... ..	... ..	4 0 0	3 10 9	3 6 0
	1286	3 8 0	3 7 3	3 14 3	3 10 0	3 12 0	3 13 9	3 3 3	2 13 6	3 8 0	2 13 0	2 0 6	... ..
	1287	2 6 9	2 11 6	.....	2 6 9	2 5 9	2 4 9	1 12 9	1 7 0	1 13 3	2 1 0	1 12 3	1 11 3
	1288	1 12 0	1 12 6	1 10 9	1 8 9	1 10 0	2 0 9	2 2 0	1 8 6	2 1 6	1 14 9	1 13 9	2 0 6
Joggur Nath Dass, of Goral-gacha.	1284	2 1 6	2 2 0	3 1 6	3 6 0	3 6 0	3 6 0	2 6 3	2 12 0	3 2 6	3 0 0	2 12 0	3 0 3
	1285	3 8 0	.....	3 5 6	3 10 0	3 14 6	3 10 6	3 11 0	3 2 0	3 4 6	3 5 0	3 10 0	3 1 0
	1286	.....	4 1 6	3 8 0	3 10 0	3 10 0	3 10 0	3 9 0	3 10 6	2 13 6	2 13 3	2 8 0	2 9 3
	1287	... ..	2 10 0	2 15 6	2 7 3	.....	.....	2 6 3	1 10 9	1 8 0	2 1 3	1 8 9	2 1 0
	1288	1 13 3	1 9 0	1 14 6	2 0 9	3 3 6	1 8 9	2 2 0	1 7 6	2 3 6	2 2 9	1 8 6	1 10 9

JUTE.

Sonaton and Mohendro Nath Ghose, of Kolachara.	1284	4 3 0	.....	.....	.....	4 1 0	4 0 0	4 3 9	4 3 0	4 5 0	4 6 0	4 6 0	4 5 3
	1285	.....	.....	... ..	.....	4 1 9	4 3 0	4 1 0	4 1 3	.....	.....	.....	.....
	1286	3 9 0	3 6 0	3 14 0	.....	.....	4 1 3	4 2 0	4 3 0	4 9 0	4 10 0	.....	.....
	1287	.....	.....	.....	.....	4 3 6	4 2 3	4 2 6	4 2 6	4 6 0	4 8 0	4 13 0	4 8 6
	1288	4 8 0	4 8 9	.....	.....	4 8 0	4 8 6	4 9 0	4 14 0	4 7 6	4 8 0	.....	.....

XVIII.—*Price of common rice.*

COMMON RICE, SEERS PER RUPEE.

Extract from a book published giving the price of crop in every month.

Lent by Baboo Peary Mohun Mookerjea.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.
1866	12 0	12 0	12 0	11 0	11 0	9 8	7 12	8 0	8 8	8 12	10 0	16 0
1867	16 0	14 0	16 0	16 0	16 0	17 0	19 0	17 0	21 0	23 0	23 0	24 0
1868	22 0	21 0	22 0	21 0	20 0	21 0	19 0	18 0	19 0	17 0	15 0	14 0
1869	14 0	15 0	18 0	18 0	17 0	15 0	17 0	15 0	16 0	16 0	17 0	18 0
1870	20 0	20 0	20 0	18 0	20 0	20 0	20 0	19 0	19 0	22 0	22 0	21 0
1871	19 0	20 0	20 0	20 0	20 0	20 0	20 0	22 0	23 0	...	17 0	17 0
1872	15 0	20 0	...	32 12	22 0	21 0	20 0	19 0	20 0	18 0	18 0	18 0
1873	18 0	17 0	18 0	18 0	18 8	18 8	19 0	18 0	19 0	13 8	11 8	13 4
1874	11 8	12 0	12 12	13 12	12 4	12 4	13 12	12 12	11 4	11 4	12 12	14 4
1875	16 8	17 4	17 4	16 4	15 8	16 0	13 4	16 0	17 0	17 8	16 8	17 0
1876	20 0	20 0	20 0	20 0	19 4	19 8	20 8	22 0	21 0	23 0	18 0	15 0
1877	18 8	18 0	18 12	17 4	14 0	13 0	12 0	11 12	11 0	13 0	13 4	13 4
1878	13 0	13 0	10 0	10 0	9 12	10 0	10 8	10 0	11 0	10 0	10 0	10 12

XIX.—*Haimontik Paddy.—Cost of cultivation.*

Village.	Ploughing.	Weeding after sowing.	Planting.	Weeding after planting.	Cutting.	Lifting.	Threshing.	Total.	Remarks.
	Bg.		Bg.	Bg.	Bg.	Bg.	Bg.	Rs.	
Tazpore ...	4 at As. 6, Re. 1-8.	.....	4 at As. 5, Re. 1-4.	3 at As. 5, As. 15.	4 at As. 5, Re. 1-4.	4 at As. 5, Re. 1-4.	3 at As. 5, As. 15.	Pl. 4 / M. 18 — 7-2	
Jonai ...	4 at As. 6, Re. 1-8.	.....	4 at As. 4½, Re. 1-1.	2 at As. 4½, As. 8½.	4 at As. 4½, Re. 1-1.	4 at As. 4½, Re. 1-1.	4 at As. 4½, Re. 1-1.	Pl. 4 / M. 18 — 6-4½	
Dattapore ...	4 at As. 4¾, Re. 1-7.	.....	5 at As. 4, Re. 1-4.	3 at As. 4, As 12.	2½ at As. 4, As. 10.	2½ at As. 4, As. 10.	2½ at As. 4, As. 10.	Pl. 4 / M. 15½ — 5-5	
Gungadhurpur ryots.	4 at As. 6, Re. 1-8.	.....	5 at As. 4½, Re. 1-6½.	3 at As. 4½, As. 13½.	4 at As. 4½, Re. 1-2.	4 at As. 4½, Re. 1-2.	4 at As. 4½, Re. 1-2.	Pl. 4 / M. 20 — 7-2	
Gungadhurpur maib.	3 at As. 4½, As. 13½.	.....	4 at As. 4½, Re. 1-1.	2 at As. 4½, As. 8½.	2 at As. 4½, As. 8½.	2 at As. 4½, As. 8½.	2 at As. 4½, As. 8½.	Pl. 3 / M. 12 — 4-0½	
Khoryal ...	4 at As. 8, Rs. 2.	Seed 16 seers Rs. 0-6 Sowing 1 ,, 0-4 Weeding 7 ,, 1-12 2-6	.....	.....	5 at As. 4, Re. 1-4.	5 at As. 4, Re. 1-4.	4 at As. 4, Re. 1.	Pl. 4 / M. 22 — 7-14	
Makhla ...	4 at As. 8, Rs. 2.	Seed 16 seers Rs. 0-6 Weeding 8 at As. 4½ ... ,, 2-2 2-8	.....	.....	5 at As. 4½, Re. 1-5½.	3 at As. 4½, As. 1½.	2 at As. 4½, As. 8½.	Pl. 4 / M. 18 — 7-2½	
Mirgola ...	4 at As. 8, Rs. 2.	Spreading manure 2 at As. 4½ Rs. 0-8½ Weeding 16 at As. 4½ ... ,, 4-4 4-12½	.....	.....	4 at As. 4½, Re. 1-1.	4 at As. 4½, Re. 1-1.	4 at As. 4½, Re. 1-1.	Pl. 4 / M. 30 — 10-1½	
Chotto Boira ...	3 at As. 8, Re. 1-8.	Manure 2 cart-loads Rs 0-10 Carriage of ,, 0-10 Weeding after sowing at As. 5½ .. ,, 2-7 3-11	.....	.....	5 at As. 5½, Re. 1-10½.	4 at As. 5½, Re. 1-5.	2½ at As. 5½, As. 13½.	Pl. 3 / M. 18 — 9-0½	
Boro Boira	4 at As. 8, Rs. 2.	Manure 40 baskets ... Re. 0-10 Spreading 40 baskets ... ,, 0-10½ 1-4½	5 at As. 5½, Rs. 1-10½.	3 at As. 5½, Re. 1.	3 at As. 5½, Re. 1.	3 at As. 5½, Re. 1.	2 at As. 5½, As. 10½.	Pl. 4 / M. 18 — 8-8½	
Kistorampore ...	4 at As. 6, Re. 1-8.	Plants, As. 8	4 at As. 4, Re. 1.	3 at As. 4, As. 12.	3 at As. 4, As 12.	3 at As. 4, As. 12.	3 at As. 4, As. 12.	Pl. 4 / M. 16 — 6	

XIX.—*Haimontik paddy.—Cost of cultivation*—concluded.

VILLAGE.	Ploughing.	Weeding after sowing.	Planting.	Weeding after planting.	Cutting.	Lifting.	Threshing.	Total.	REMARKS.
	Bg.		Bg.	Bg.	Bg.	Bg.	Bg.	Rs.	
Chuk Kisto ...	5 at As. 6, Re. 1-14.	.....	5 at As. 4, Re. 1-4.	3 at As. 4, As. 12.	5 at As. 4, Re. 1-4.	5 at As. 4, Re. 1-4.	4 at As. 4, Re. 1.	Pl. 5 M. 22 } 7-6	
Jagonnathbati ...	3 at As. 8, Re. 1-8.	Making ails 2 at As. 4, As. 8.	4 at As. 4, Re. 1.	2 at As. 4, As. 8.	4 at As. 4, Re. 1.	4 at As. 4, Re. 1.	4 at As. 4, Re. 1.	Pl. 3 M. 20 } 6-8	
Kolachora	4½ at As. 5½, Re 1-8.	.....,	5 at As. 4½, Re. 1-6½.	4 at As. 4½, Re. 1-2.	8 at As. 4½, Rs. 2-4.	3 at As. 4½, As. 13½.	3 at As. 4½, As. 13½.	Pl. 4½ M. 23 } 7-15½	
Roghunathpur sown.	4 at As. 8, Rs. 2.	14 at As. 5½, Rs. 4-70½	.....	.....	5 at As. 5½, Re. 1-10½.	4 at As. 5½, Re. 1-5½.	2 at As. 5½, As. 10-4.	Pl. 4 M. 25 } 10-4½	
Roghunathpur (planted).	4 at As. 8. Rs 2.	Plants, Re. 1	6 at As. 5½, Rs. 2.	4 at As. 5½, Re 1-10½,	4 at As. 5½, Rs 1-5.	4 at As. 5½, Rs. 1-5.	2 at As. 5½, As. 10½.	Pl. 4 M. 20 } 9-10½	
Goolgacha (sown)...	4 at As. 8, Rs. 2.	10 at As. 4½, Rs. 2-10½	Seeds 2½ paili	.....	8 at As 5½, Rs. 2-10½.	2 at As. 5½, As. 10½.	3 at As. 5½, Re. 1.	Pl. 4 M. 23 } 8-14½	
Makhalpara ...	4 at As. 8, Rs. 2.	11 at As. 4½, Rs. 3-1½...	As. 6 ...	.....	16 at As. 4½, Rs. 4-8.	Spreading 3 at As. 4½, As 13½.	3 at As. 4½, As. 13½.	Pl. 4 M. 33 } 11-12½	
Bamundanga ...	5 at As. 8, Rs. 2-8.	8 at As. 4½, Rs. 2-4 ...	4 at As. 4½, Re. 1-2.	4 at As. 4½, Re. 1-2.	4 at As. 4½, Re. 1-2.	4 at As. 4½, Re. 1-2.	2 at As. 4½, As. 9.	Pl. 5 M. 18 } 7-1³	
Aujoodhya— Sowing	6 at As. 8, Rs. 3.	Seed 16 seer, As. 8 ...	.....	12 at As. 4½, Rs. 3-3.	8 at As. 4½, Rs. 2-2.	8 at As. 4½, Rs. 2-2.	4 at As. 4½, Re 1-1.	Pl. 6 M. 32 } 12-0	
Planting	8 at As. 8, Rs. 4.	12 at As. 4½, Rs. 3-3 ...	.....	4 at As. 4½, Re. 1.				Pl. 8 M. 36 } 13-9	
Khanpur	5 at As. 8, Rs. 2-8.	Seed 16 seers, As. 8 ...	.....	10 at As. 4½, Rs. 2-10½.	10 at As. 4½, Rs. 2-10½.	4 at As. 4½, Rs. 1-1.	4 at As. 4½, Re. 1-1.	Pl. 5 M. 28 } 10-7½	
Eklokee	5 at As. 8, Rs. 2-8.	Seed 16 seers .. As. 8 Sowing 2 at As. 4½ ... ... „ 9½ * 1-1½	.....	12 at As. 4½, Rs. 3-3.	10 at As. 4½, Rs 2-10½.	3 at As. 4½, As. 12½.	4 at As. 4½, Re. 1-1.	Pl. 5 M. 29 } 9-3½	
Kumirmorah— Wet	4 at As. 8, Rs. 2.	5 at As. 4½, Re. 1-5½ ...	.....	4 at As. 4½, Re. 1-1.	6 at As. 4½, Re. 1-9½.	6 at As. 4½, Re. 1-9½.	3 at As. 4½, As. 12½.	Pl. 4 M. 24 } 7-8½	
Dry	4 at As. 8, Rs. 2.	5 at As. 4½, Re. 1-5½ ...	.....	4 at As. 4½, Re. 1-1.	3 at As. 4½, As. 12½.	3 at As. 4½, As 12½.	3 at As. 4½, As. 12½.	Pl. 4 M. 18 } 5-15½	
Gokulpore	4 at As. 8, Rs. 2.	4 at As. 4, Re. 1 ...	.....	3 at As. 4, As 12.	6 at As. 4, Re. 1-8.	4 at As. 4, Re. 1.	2 at As. 4, As. 8.	Pl. 4 M. 19 } 6-12	
Bashye	3 at As. 8, Re. 1-8.	Seed 16 seers, As. 6 ...	.....	6 at As. 4½, Re. 1-9½.	6 at As. 4½, Re. 1-9½.	5 at As. 4½, Re. 1-5½.	4 at As. 4½, Re. 1-1.	Pl. 3 M. 21 } 7-7½	
Chunditola— Above	6 at As. 8, Rs. 3.	Seed 16 seers, As. 8 ..	.....	8 at As. 4½, Rs. 2-2.	6 at As. 4½, Re. 1-9½.	3 at As. 4½, As. 12½.	3 at As. 4½, As. 12½.	Pl. 6 M. 20 } 8-13	
Below	8 at As. 8, Rs. 4.	Seed 15 seers, As. 8 ...	.....	8 at As. 4½, Rs. 2-2.	8 at As. 4½, Rs. 2-2.	8 at As. 4½, Rs. 2-2.	4 at As. 4½, Re. 1-1.	Pl. 8 M. 28 } 11-15	

XX — *Jute—cost of cultivation.*

XX.—*Jute—Cost of* Cultivation

Number.	Village.	Seeds.		Ploughing.			Weeding.	
		Rs. A.		Rs. A.			Mds.	Rs. A. P.
1	Tajpur ...	... 1 0	6	at As. 6-0	2 4	... ...	18 at As. 4-6	5 1 0
2	Jonai ...	2 seers 0 8	4	,, 6-0	1 8	... ...	16 ,, 4-6	4 4 0
3	Kalipur ...	1 seer 0 3	4	,, 7-6	1 14	... ...	15 ,, 4-3	3 15 9
4	Monberh ...	½ ,, 0 2	6	,, 10-0	3 12	... ...	24 ,, 4-3	6 6 0
						Rs. A.		
5	Chota Boira ...	... 0-2-6	5½	at 3 per rupee, Rs. 2-12		Manure, carrying 1 3	6½ at 3 rupee	2 2 6
6	Boro Boira ...	.....	8	at As. 8-0	4 0	Oil refuse ... ... 1 4 Cowdung ... ... 1 0 Spreading 1 0	12 at As. 5-3	4 0 0
						3 4		
7	Kristorampur	... 0 4	4	,, 6-0	1 8	... ...	14 ,, 4-0	3 8 0
8	Kalachora ...	1 rake 0 8	5	,, 8-0	2 8	... ...	14 ,, 4-6	3 15 0
9	Pyragacha ...	... 0 4	4 ,, 1 ,,	8-0	2 8	Throwing up earth 8 at 4½ ... ... 2 4 2 maunds oil refuse 3 0	10 ,, 4-6	2 13 0
10	Begumpur ...	... 0 4	4	,, 8-0	2 0		18 ,, 5-3	4 10 6
						Rs. A. P.		
11	Adan ...	... 0 2	4	,, 8-0	2 0	Oil refuse 2 at 1-5 2 10 0	16 ,, 4-0	4 0 0
12	Roghonathpur	... 0 8	5	,, 8-0	2 8	Cowdung 50 baskets ... ... 1 0 0 Spreading 2 at As. 5-4 ... ... 0 10 6	15 ,, 5-3	5 0 0
						1 10 6		
13	Monohurpur...	... 0 2	5	,, 8-0	2 8	Cowdung 50 baskets ... ... 1 0 0 Spreading 2 at 4½ ... ... 0 9 0 Oil refuse 1 md. 1 0 0	14 ,, 4-6	3 15 0
						2 9 0		
14	Gorulgacha ...	... 0 8	6	,, 8-0	3 0	Cowdung 100 baskets ... ... 1 0 0 Labor of spreading 4 ... ... 1 1 0 Throwing up earth 8... ... 2 2 0	20 ,, 4-3	5 5 0
						4 3 0		
15	Borizbatty ...	... 0 0	5	,, 8-0	2 8		14 ,, 4-6	3 15 0
16	Bamundanga	2 seers 0 3	4	,, 8-0	2 0	Throwing up earth at	12 ,, 4-6	3 6 0
17	Aujoodhya ...	1½ ,, 0 6	8	,, 4-3	2 2		12 ,, 4-3	3 3 0
18	Khanpur ...	1½ ,, 0 6	6	,, 8-0	3 0		20 ,, 4-3	5 5 0
19	Eklokee ...	3,, at 4 0 12	5	,, 8-0	2 8		16 ,, 4-3	4 4 0
20	Komurmorah	... 0 2	4	,, 8-0	2 0		20 ,, 3-6	4 1 0
21	Romanathpur	... 0 6	6	,, 8-0	3 0		18 ,, 4-0	4 4 8
22	Bashye ...	.....	4	,, 8-0	2 0		10 ,, 4-3	2 10 6
23	Chunditola ...	.....	4	,, 6-0	1 8		10 ,, 4-3	2 10 6

cultivation.

of Jute.

Cutting.	Steeping.	Beating.	Drying.	Total.
Mds. A. P. Rs. A. P.	Mds. A. P. Rs. A. P.	Mds. A. P. Rs. A. P.	Mds. A. P. Rs. A. P.	Rs. A. P.
5 at 4-6 1 6 6	5 at 4-6 1 6 6	8 at 4-6 2 4 0	.....	Pl. 6 / M. 42 — 13 6 0
4 „ 4-3 1 1 9	2 „ 4-3 0 8 6	4 „ 4-3 1 1 0	2 at 4-3 0 8 6	Pl. 4 / M. 28 — 9 7 0
4 „ 4-3 1 1 0	4 „ 4-3 1 1 0	4 „ 4-3 1 1 0	.....	Pl. 4 / M. 27 — 9 4 0
6 „ 4-3 1 9 6	6 „ 4-3 1 9 6	6 „ 4-3 1 9 6	Manure 1 0 0 Spreading 1 0 0 4 at 4-0 2 0 0	Pl. 6 / M. 46 — 17 0 6
4 „ 5-3 1 5 3	2 „ 5-3 0 10 6	5 „ 5-3 1 10 6	.....	Pl. 5½ / M. 26 — 9 1 0
5 „ 5-3 1 10 6	5 „ 6-3 1 10 6	5 „ 5-3 1 10 6	.....	Pl. 8 / M. 30 — 16 3 3
6 „ 4-0 1 8 0	6 „ 4-0 1 8 0	5 „ 4-0 1 4 0	.....	Pl. 4 / M. 31 — 9 8 0
3 „ 4-6 0 13 6	5 „ 4-6 1 6 6	6 „ 4-6 1 11 0	.....	Pl. 5 / M. 28 — 10 14 0
4 „ 4-6 1 2 0	5 „ 4-5 1 6 6	5 „ 4-6 1 6 6	2 at 4-6 0 9 0	Pl. for 5 / M. 34 — 10 1 / 15 5 — without manure.
4 „ 5-3 1 5 3	3 „ 5-3 1 0 0	7 „ 5-3 2 5 3	2 „ 5-3 0 10 6	Pl. 4 / M. 30 — 12 3 6
5 „ 4-0 1 4 0	5 „ 4-0 1 4 0	6 „ 4-0 1 8 0	.....	Pl. 4 / M. 32 — 12 12 0
6 „ 5-3 2 0 0	8 „ 5-3 2 10 6	6 „ 5-3 2 0 0	2 „ 5-6 0 10 6	Pl. 5 / M. 39 — 16 14 6
5 „ 4-6 1 6 6	5 „ 4-6 1 6 6	5 „ 4-6 1 6 6	2 „ 4-6 0 9 0	Pl. 5 / M. 31 or 33 — 11 3 6 with manure. / 13 12 6 without do.
6 „ 4-5 1 9 6	5 „ 4-3 1 5 3	8 „ 4-3 2 2 0	.....	Pl. 6 / M. 51 — 18 0 9
4 „ 4-6 1 2 0	8 „ 4-6 2 4 0	4 „ 4-6 1 2 0	2 „ 4-6 0 9 0	Pl. 5 / M. 32 — 11 14 0
4 „ 4-6 1 2 0	4 „ 4-6 1 2 0	6 „ 4-6 1 11 0	2 „ 4-6 0 9 0	Pl. 4 / M. 32 — 11 3 0 or or 30 — 10 8 0
6 „ 4-3 1 9 6	4 „ 4-3 1 1 0	8 „ 4-3 2 2 0	2 „ 4-3 0 8 6	Pl. 8 / M. 42 — 18 8 6
6 „ 4-3 1 9 6	4 „ 4-3 1 1 0	6 „ 4-3 1 9 6	2 „ 4-3 0 8 6	Pl. 6 — 16 6 0 or 46 / or 40 — 15 4 6
3 „ 4-3 0 12 3	3 „ 4-3 0 12 9	6 „ 4-3 1 9 6	2 „ 4-3 0 8 6	Pl. 5 / M. 34 — 15 5 9
6 „ 3-6 1 5 0	4 „ 3-6 0 14 0	6 „ 3-6 1 5 0	.....	Pl. 4 / M. 36 — 9 11 0
5 „ 4-0 1 4 0	6 „ 4-0 1 8 0	6 „ 4-0 1 8 0	3 „ 4-0 0 12 0	Pl. 6 / M. 38 — 12 14 0
4 „ 4-3 1 1 0	4 „ 4-3 1 1 0	6 „ 4-6 1 9 6	2 „ 4-3 0 8 6	Pl. 4 / M. 28 — 14 3 0
6 „ 4-3 1 9 6	6 „ 4-3 1 9 6	8 „ 4-3 2 2 0	2 „ 4-3 0 8 6	Pl. 4 / M. 34 — 11 9 6

XXI.—*Kolai.—Cost of cultivation.*

Cultivation of kolai.

Numbers.	Village.	Seed.	Plough.	Lift.	Thresh.	Total.	Remarks.
	Jonai	2 seers, 2 annas.	2, at 6 annas, 12 annas.	2, at 4½ annas, 8½ annas.	2, at 4½ annas, 8½ annas.	Pl. 2 M. 4	
	Monberh ...	10½ seers, Re. 1.	4, at 8 annas, Rs. 2.	3, at 4½ annas, 12¾ annas.	3, at 4½ annas, 12¾ annas.	Pl. 4 M. 6	
	Kristorampore	10 annas.	6, at 6 annas, Rs. 2-4.	3, at 4 annas, 12 annas.	2, at 4 annas, 8 annas.	Pl. 6 M. 5	
	Kolachorah ...	Rs. 2 ...	2, at 8 annas, Re. 1.	6, at 4 annas, Re. 1-8.	Ditto ...	Pl. 2 M. 8	
	Pyragacha ...	Re. 1 ...	3, at 8 annas, Re. 1-8.	4, at 4½ annas, Re. 1-2.	2, at 4½ annas, 9 annas.	Pl. 3 M. 6	
	Begumpore ...	,, 1 ...	4, at 5½ annas, Re. 1-5½.	.....	2, at 5½ annas, 10¾ annas.	Pl. 4 M. 2	
	Adan	,, 1 ...	4, at 8 annas, Rs. 2.	.....	6, at 4 annas, Re. 1-8.	Pl. 4 M. 6	
	Gorulgacha ...	12 seers, Re. 1.	Ditto ...	.....	3+8 = 5, at 4½ annas, Re. 1-4½.	Pl. 4 M. 5	
	Bamundanga	16 seers, Re. 1.	4, at 6 annas, Re. 1-8.	.....	4+2 = 6, at 4½ annas, Re. 1-11.	Pl. 4 M. 6	
	Aujoodhya ...	Ditto ...	6, at 8 annas, Rs. 3.	.....	8, at 4½ annas, Rs. 2-2.	Pl. 6 M. 8	
	Eklokee ...	16 seers, Rs. 2.	4, at 8 annas, Rs. 2.	.....	6, at 4½ annas, Re. 1-9¾.	Pl. 4 M. 9	
	Kumirmorah	10 seers, Re. 1.	3, at 5½ annas, Re. 1-0½.	.....	4, at 3¾ annas, 15 annas.	Pl. 4 M. 8	
	Bashye ...	8 annas ...	3, at 8 annas, Re. 1-8.	.....	6, at 4½ annas. Re. 1-9½.	Pl. 3 M. 8	
	Chunditola ...	Re. 1 ...	5, at 5 annas, Re. 1-14.	.....	Ditto ...	Pl. 3 M. 8	

XXII.—*Baigun.—Cost of cultivation.*

Cultivation of baigun.

No.	Village.	Plough.	Transplanting.	Hoeing.	Watering.	Manure.	Farthing of roots.	Weed.	Hoeing.	Weeding.	Aftervals.	Remarks.
		Bg.	Bg.	Bg.	Bg.	Mds.	Bg.	Bg.	Bg.	Bg.		
	Kalipore	4 at Rs. 7½ = Re. 1-14	2 at Rs. 4½ = As. 8½	4 at Rs. 4½ = Re. 1-1	2 at Rs. 4½ = As. 8½	3½ at Rs. 1½ = Rs. 4-6	4 at As. 4½ = Re. 1-1	5 at As. 4½ = Re. 1-5½	4 at As. 4½ = Re. 1-1	Say 6 at As. 4½ = Rs. 1-9½	Plough = 4 Men = 27 Cost about Rs. 1½	

XXIII.—*Sugarcane—cost of cultivation.*

Cultivation of sugarcane.

Process.	Number.	Rate.	Cost.
Makhla.		Rs. A. P.	Rs. A. P.
Plough	4	0 8 0	2 0 0
Hoe	7	0 4 3	1 13 9
Oil refuse for manure ...	4 mds.	1 0 0	4 0 0
Plants	4 kahuns.	2 0 0	8 0 0
Labour of planting with manure.	12	0 4 3	3 3 0
Hoeing young plants, three times (six each time).	18	0 4 3	4 12 6
Second supply of manure	4 mds.	1 0 0	4 0 0
Opening out roots and hoeing ridges.	12 „	0 4 3	3 3 0
Tying up leaves (Assar to Ugrahan), 5 men, 5 times.	25	0 4 3	6 10 3
Cutting and crushing, 7 days.	7 days	5 5 0	37 3 0
Total ...	4 plough, 158 men, manure 8 maunds.		74 15 6
Particulars of cutting and crushing.			
Hire of mill daily	... ...	.....	1 0 0
Four bullocks to drive, per 8 annas.	.....	.....	1 0 0
Three men at mill: one to hand, one to feed, one to receive refuse.			
Three to cut, prepare, and bring cane.			
One stoker	.....	0 4 3	3 3 0
Two bullock-drivers ...			
Three goor-boilers ...			
			5 3 0

Process.	Number.	Rate.	Cost.
Boro Bohera.		Rs. A. P.	Rs. A. P.
Plough	8	0 8 0	4 0 0
Manure cowdung ...	100 baskets.	.....	2 0 0
Spreading	6	3 per Re.	2 0 0
Cane cuttings	4 kahuns	...	8 0 0
Cost of planting these ...	16	3 per Re.	5 5 3
Oil refuse for planting ...	1½ mds.	1 0 0	1 8 0
Irrigation, three times, at 12 each time.	36	3 0 0	12 0 0
Bamboos for fence ...	100	.....	4 0 0
Labour of fencing ...	18	3 per Re.	6 0 0
Opening out roots and ridging.	4	3 „	1 5 3
Clearing out jungle ...	4	3 „	1 5 3
Manure again	8 mds.	1 3 „ 0	9 8 0
Spreading in tying up plants, five men, five times.	25	0 5 3	8 5 3
Cutting and crushing ...	4 days	5 0 0	20 0 0
			86 15 6
Plough	8		
Men	162		
Particulars of cutting and crushing.			
Hire of mill	.....	.....	1 0 0
Two pair of bullocks ...	.....	.....	1 0 0
Two drivers, 3 at mill, 2 feeding cane removing refuse, 4 to cut and prepare, 3 boilers.	12	.....	4 0 0
			6 0 0

Boro Bohera.

Cultivation of one bigha of one dhoncha.

		Rs. A. P.	Rs. A. P.
Plough	4	0 8 0	2 0 0
Cut	8	0 5 3	2 10 6
Lift	8	0 5 3	2 10 6
Total ...	4 plough 16 men		7 5 0

Process.	Number.	Rate.	Cost.
Kolachora.		Rs. A. P.	Rs. A. P.
Plough	6	0 8 0	3 0 0
Plants	3 kahuns	.....	7 8 0
Oil refuse	8 mds.	1 4 0	10 0 0
Planting	6	0 5 3	2 0 0
Irrigation, five times, five each time.	25	0 5 3	8 5 3
Hoe	6	0 5 3	2 0 0
Making ridges ...	4	0 5 3	1 5 3
Opening roots and putting manure.	5	0 5 3	1 10 6
Breaking and tying leaves, four, six times.	24	0 5 3	8 0 0
Cutting and crushing	7 days.	5 0 0	35 0 0
			78 13 0
Plough	6		
Meu	161		
Particulars of cutting and crushing.			
Hire of wooden mill'...	.....	.....	8 0 0
Four bullocks, 2 drivers, 3 mill attendants, 4 cutters, and 4 boilers. Cutters, Rs. 7-8 per month; boilers Rs. 7-8 per month.	13	.....	3 11 6
			5 3 6

XXIII.—*Sugarcane—cost of cultivation*—continued.

Process.	Number.	Rate.	Cost.
Pyragacha.		Rs. A. P.	Rs. A. P.
Plough	6	0 8 0	3 0 0
Cuttings	3 to 3½ kahuns.	.....	7 0 0
Planting	6	.....	1 11 0
Cowdung	100 baskets.	.....	2 0 0
Oil refuse	8 mds.	1 4 0	10 0 0
Irrigation, six times ...	54	0 4 6	15 3 0
Hoe	6	0 4 6	1 11 0
Making ridges	4	0 4 6	1 2 0
Opening and putting manure.	6	0 4 6	1 11 0
Breaking and tying leaves, six times, 4 each time.	24	0 4 6	6 12 0
Cutting and crushing ...	6 days.	5 0 0	30 0 0
			80 1 0
Plough	6		
Men	178		
Particulars of cutting and crushing.			
Hire of mill	.....	.....	1 4 0
Two pair bullocks	.....	.....	1 0 0
Two drivers, 4 at mill, 4 cutters, 3 boilers.	13	.....	3 10 6
			5 14 6

Process.	Number.	Rate.	Cost.
Roghoonathpur.		Rs. A. P.	Rs. A. P.
Plough	4	0 8 0	2 0 0
Cuttings	3½ kahuns.	1 4 0	4 6 0
Oil refuse	6 mds.	1 4 0	7 8 0
Cowdung	50 baskets.	.....	1 0 0
Spreading	4	0 4 6	2 13 0
Planting	10	0 4 6	2 13 0
Hoeing three times, 6 at each time.	18	0 4 6	5 1 0
Manuring and tying leaves.	12	0 4 6	3 6 0
Breaking and tying leaves, five times in addition, 4 each time.	20	0 4 6	5 10 0
Cutting and crushing ...	4½	6 0 0	27 0 0
			59 14 0
Plough	4		
Men	118		
Particulars of cutting and crushing.			
Hire of mill	.....	.....	1 0 0
Two pair bullocks with drivers.	.....	.....	2 0 0
Three cutters, 3 at mills, 3 boilers, and 1 stoker.	10	0 8 0	3 0 0
			6 0 0

Process.	Number.	Rate.	Cost.
Ekloree.		Rs. A. P.	Rs. A. P.
Plough	8	0 8 0	4 0 0
Cuttings	2½ kahuns.	2 0 0	5 0 0
Oil refuse	5 mds.	1 8 0	7 8 0
Planting	16	0 4 3	4 4 0
Irrigation, four times, nine each time.	36	0 4 3	9 9 0
Hoeing after irrigation, nine times, five.	20	0 4 3	5 5 0
Making ridges	5	0 4 3	1 5 3
Opening, manuring, and earthing.	6	0 4 3	1 9 6
Breaking and binding, six, five times.	30	0 4 3	7 15 6
Weeding	5	0 4 3	1 5 3
Irrigation after rains, nine, twice.	18	0 4 3	4 12 6
Cutting and crushing ...	6 days	4 8 0	27 0 0
			79 10 0
Plough	8		
Men	220		
Particulars of cutting and crushing.			
Mill hire	.....	.....	0 8 0
Bullocks 4 with drivers.	.....	.....	2 0 0
Cutters 5, tenders 3 ...	8	0 4 3	2 2 0
Boilers and stoker 4 ...	4	0 4 3	1 1 0
			5 11 0

XXIII.—*Sugarcane—cost of cultivation*—continued.

Process.	Number.	Rate.	Cost.
Gorolgacha.		Rs. A. P.	Rs. A. P.
Plough	4	0 8 0	2 0 0
Cuttings	3 kahuns	4 0 0	12 0 0
Throwing up earth ...	8	0 4 3	2 2 0
Oil refuse	5 mds.	1 4 0	6 4 0
Planting	8	0 4 3	2 2 0
Irrigation, three times, nine each time.	27	0 4 3	7 2 9
Hoe after irrigation, five each time.	15	0 4 3	4 0 0
Opening out and making furrows.	6	0 4 3	1 9 6
Putting manure and earthing up.	7	0 4 3	1 13 9
Breaking leaves and binding canes with them, five times, five.	25	0 4 3	6 10 3
Irrigation after rains, nine men, twice.	18	0 4 3	4 12 6
Cutting and crushing, five days.	5 days.	4 8 0	22 8 0
			73 0 9
Plough	4		
Men	174		
Particulars of cutting and crushing.	4		
Hire of mill	1	.....	0 8 0
Two pair bullocks with drivers.	2	1 0 0	2 0 0
Cutters 3, mill attendants 3, boilers 3, and 1 stoker.	10	0 4 6	2 13 0
		.....	5 5 0

Process.	Number.	Rate.	Cost.
Romanathpur.		Rs. A. P.	Rs. A. P.
Plough	6	0 8 0	3 0 0
Cuttings	2 kahuns	4 0 0	8 0 0
Oil refuse	2 mds.	1 8 0	3 0 0
Planting	8	0 4 0	2 0 0
Irrigation, six times, eight.	48	0 4 0	12 0 0
Hoe, six times, six ...	36	0 4 0	9 0 0
Making ridges	6	0 4 0	1 8 0
Oil refuse	8 mds.	1 6 0	11 0 0
Manuring and earthing up.	10	0 4 0	2 8 0
Breaking and binding leaves, six. 8 times.	48	0 4 0	12 0 0
Irrigation, eight times, four.	32	0 4 0	8 0 0
Cutting and crushing ...	6 days.	5 0 0	30 0 0
			103 0 0
Plough	6		
Men	274		
Particulars of cutting and crushing.			
Hire of iron mill ...	.....	.....	1 4 0
Three pair bullocks ...	.....	.....	1 8 0
Food for ditto, 3 annas per pair.	3	.....	0 9 0
Drivers	2		
Feeders	2		
Stoker	1	14	..... 3 8 0
Boilers	3		
Cutters	6		
			6 13 0

Process.	Number.	Rate.	Cost.
Bamandanga.		Rs. A. P.	Rs. A. P.
Plough	5	0 8 0	2 8 0
Cuttings	1½ kahuns	4 0 0	6 0 0
Oil refuse	6 mds.	1 4 0	7 8 0
Planting	6	0 4 6	1 11 0
Throwing up earth in Bysack.	8	0 4 6	2 4 0
Irrigation, four times, Bysack and Jeyt, nine each time.	36	0 4 6	10 2 0
Hoeing after irrigation, four times, four each time.	16	0 4 6	4 8 0
Making ridges, opening roots, manuring, and earthing up.	4	0 4 6	1 2 0
Breaking and tying leaves, five times, five each time.	25	0 4 6	7 0 6
Irrigation after rains, three times, nine each time.	27	0 4 6	7 9 6
Cutting and crushing, six days.	6 days.	4 0 0	24 0 0
			75 7 0
Plough	5		
Men	193		
Particulars of cutting and crushing.			
Hire of mill iron ...	.....	.....	1 0 0
Ditto wooden ...	.....	.....	0 8 0
Three or 2 pair of bullocks	.....	.....	1 0 0
Drivers	2		
Feeders	3		
Cutters	3	11	0 4 6 3 0 0
Boilers	3		
With iron ...			5 0 0
With wooden ...			4 8 0

XXIII.—*Sugarcane—cost of cultivation*—continued.

Process.	Number.	Rate.	Cost.
Basipota.		Rs. A. P.	Rs. A. P.
Plough	8	0 8 0	4 0 0
Cuttings	3½ kahuns.	1 4 0	4 6 0
Oil refuse	2 mds.	1 0 0	2 0 0
Planting	12	0 4 0	3 0 0
Carrying water	4	0 4 0	1 0 0
Hoeing twice, three-half each	7	0 4 0	1 12 0
Oil refuse	2 „	1 2 0	2 4 0
Manuring and earthing .	12	0 5 3	4 0 0
Breaking and binding leaves, three, ten times.	30	0 4 3	7 15 5
Cutting and crushing ...	4 days.	4 4 0	17 0 0
			47 5 6
Plough	8		
Men	109		
Particulars of cutting and crushing.			
Mill ...	.....	.....	0 8 0
Two pair bullocks with drivers.	.....	.....	1 8 0
Cutting 2, feeding 3, stoker 1, boilers 2, at house 1.	9	0 4 3	2 6 3
			4 6 3

Process.	Number.	Rate.	Cost.
Aujoodhya.		Rs. A. P.	Rs. A. P.
Plough	8	0 8 0	4 0 0
Cuttings	20 pons.	4 0 0	5 0 0
Oil refuse	6 mds.	1 4 0	7 8 0
Cutting up cuttings ...	4	0 4 3	1 1 0
Planting	8	0 4 3	2 2 0
Irrigation, four times, 9 each time.	36	0 4 3	9 9 0
Hoe after irrigation, four times, 5 each time.	20	0 4 3	5 5 0
Making ridges ...	4	0 4 3	1 1 0
Throwing up earth ...	8	0 4 3	2 2 0
Opening, manuring, and earthing up.	5	0 4 3	1 5 3
Breaking and tying leaves, five times, 5 each time.	25	0 4 3	6 10 3
Weeding	6	0 4 3	1 9 6
Irrigation, three times, 9 each time.	27	0 4 3	7 2 9
Cutting and crushing ...	5 days.	6 0 0	30 0 0
			84 7 9
Plough	8		
Men	198		
Particulars of cutting and crushing.			
Cost of mill being Rs. 20, $\frac{1}{65}$	.....	.....	0 5 6
Haries Rs. 2, $\frac{1}{10}$ of this ...	.. ...	... ..	0 1 0
Bullocks	6	.....	1 8 0
Drivers 2, feeders 3, cutters 3, boilers 3.	11	0 4 3	2 14 9
			4 13 3

Process.	Number.	Rate.	Cost.
Chanditola.		Rs A. P.	Rs. A. P.
Plough	8	0 6 0	3 0 0
Cuttings	4 kahuns.	2 0 0	8 0 0
Oil refuse	8 mds.	1 6 0	11 0 0
Planting	12	0 4 3	3 3 0
Irrigation, four times, 9	36	0 4 3	9 9 0
Hoeing, four times, 8 ...	32	0 4 3	8 8 0
Making ridges .	6	0 4 3	1 9 6
Manuring and earthing	4	0 4 3	1 1 0
Pulling off dead leaves and tying.	10	0 4 3	2 10 6
Breaking and binding, six times, 4.	24	0 4 3	6 6 0
Irrigating twice, 5 ...	10	0 4 3	2 10 6
Cutting and crushing ...	8 days.	5 4 0	42 0 0
			99 9 6
Plough	8		
Men	230		
Particulars of cutting and crushing.			
Hire of iron mill .	.....	.....	1 4 0
Three pair cattle ...	.....	.....	1 8 0
Drivers 3, feeders 2, boilers 3, and cutters 4.	12	0 4 3	3 3 0
			5 15 0

XXIII.—*Sugarcane—cost of cultivation*—continued.

Process.	Number.	Rate.	Cost.
Makla.		Rs. A. P.	Rs. A. P.
Ploughs	6	0 8 0	3 0 0
Cuttings	3 kahuns	1 8 0	4 8 0
Oil refuse	4 maunds	1 0 0	4 0 0
Plant	10	0 4 3	2 10 6
Hoe (Falgoon and Bysack, 3+3 = ...	6	0 4 3	1 9 6
Oil refuse	2 maunds	1 0 0	2 0 0
Earth up, break, and bind	8	0 4 3	2 2 0
Break and bind four times, 2 ...	8	0 4 3	2 2 0
Cut and crush	6 days.	5 4 0	31 8 0
			53 8 0
Particulars of cutting and crushing not taken.			
Plough	6		
Men	104		

Process.	Number.	Rate.	Cost.
Monibampur.		Rs. A. P.	Rs. A. P.
Plough	6	0 6 0	2 4 0
Cuttings	5 kahuns.	2 0 0	10 0 0
Oil refuse	2 maunds	1 4 0	2 8 0
Planting	8	0 4 6	2 4 0
Irrigate	10	0 4 6	2 13 0
Hoe	4	0 4 6	1 2 0
Irrigate	10	0 4 6	2 13 0
Hoe	4	0 4 6	1 2 0
Irrigation, five times, 10	50	0 4 6	14 1 0
Hoe, five times, 4	20	0 4 6	5 10 0
Oil refuse	6 maunds	1 1 0	6 6 0
Manuring and earthing up	6	0 5 6	2 1 0
Breaking and binding, five times, 6	30	0 4 6	8 7 0
Irrigation, three times, 5+9+9 ...	23	0 4 6	6 7 6
Cutting and crushing	6 days.	4 8 0	27 0 0
			91 14 6
Plough	6		
Men	225		
Particulars of cutting and crushing.			
Hire of mill	.....	.....	1 4 0
Three pair of bullocks with drivers	.....	0 12 0	2 4 0
Cutters 4, feeder 1	5	0 4 6	1 6 6
Fireman 1, boiler 1	2	0 6 0	0 13 0
			5 10 6

XXIII.—*Sugarcane—cost of cultivation*—concluded.

GUNGADHARPORE.

	Naib's Account.			Ryots' Account		
Process.	Number.	Rate.	Cost.	Number.	Rate.	Cost.
		Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.
Cuttings	4 kahuns.	2 0 0	8 0 0	5 kahuns.	2 0 0	10 0 0
Irrigate for ploughing	8	0 4 3	2 2 0	8	0 4 6	2 2 0
Plough	6	0 5 0	1 14 0	6	0 6 3	2 5 6
Plant	10	0 4 3	2 10 6	10	0 4 3	2 10 6
Oil re use	2 maunds.	1 0 0	2 0 0	2	1 0 0	2 0 0
Irrigate	8 times 5 = 40	0 4 3	10 10 0	8 times 8 = 64	0 4 3	17 0 0
Hoe	8 times 4 = 32	0 4 3	8 8 0	8 times 4 = 32	0 4 3	8 8 0
Earth and manure	4	0 4 3	1 1 0	4	0 4 3	1 1 0
Oil refuse	8 maunds,	1 6 0	11 0 0	8 maunds.	1 7 0	11 8 0
Cleaning roots	10	0 4 3	2 10 6	10	0 4 3	2 10 6
Break and bind, 5 × 5	25	0 4 3	6 10 3	5 × 5 = 25	0 4 3	6 10 3
Irrigate after rains, 4 × 8	32	0 4 3	8 8 0	4 × 8 = 32	0 4 3	8 8 0
Cut and crush, 10 days	10 days.	5 0 0	50 0 0	5 days.	5 0 0	25 0 0
			115 10 3			99 15 9
Plough	6					
Men	283			Plough 6		
				Men 245		
Particulars of cutting and crushing.						
Expenses for 40 days—						
Making shed and oven				8	0 4 3	2 2 0
Haries						2 4 0
Jars for juice						1 8 0
Two ars for goor						1 8 0
Gamlas						0 4 0
						8 10 0
Or, daily			0 3 6			
Daily expenses—						
Hire of mill (iron)			1 4 0			
Three pair of bullocks with drivers		6 0 0	1 2 0			
Relief for drivers to tend mill	3	0 4 3	0 12 9			
Boiler, fireman, and 4 cutters	6	0 4 3	1 9 6			
			4 15 9			

XXIV.—*Potato.—Cost of cultivation.*

Cost of cultivating potatoes of 1 bigha of land.

Village Kristorampur.				Village Joggonnathbatty.				Village Begumpore.			
Process.	No.	Rate.	Cost.	Process.	No.	Rate.	Cost.	Process.	No.	Rate.	Cost.
		Rs. A. P.	Rs. A. P.			Rs. A. P.	Rs. A. P.			Rs. A. P.	Rs. A. P.
Ploughs	8	0 5 3	2 10 6	Ploughs	10	0 5 3	3 5 3	Ploughs	12	0 5 3	4 0 0
Seed (Bombay) ...	6 mds.	7 0 0	42 0 0	Seed (Country) ...	6 mds.	8 0 0	48 0 0	Seed (Country) ...	2 mds.	20 0 0	40 0 0
Seed (Country) ...	1¼ ,,	20 0 0	30 0 0	Seed (Bombay) ...	1 ,,	23 0 0	22 0 0	Seed (Bombay) ...	6 ,,	6 0 0	36 0 0
Oil refuse including carriage.	7 ,,	1 8 0	10 8 0	Oil refuse	6 ,,	1 5 6	8 1 0	Oil refuse	6 ,,	1 4 0	7 8 0
				Planting	12	0 4 0	3 0 0	Cowdung	50 baskets.	...	2 0 0
For country	5	1 8 0	7 8 0	Irrigation (7 times), 3 men.	21	0 4 0	5 4 0	Spreading	3	0 5 0	0 15 0
Planting	11	0 4 0	2 12 0					Planting	10	0 5 0	3 2 0
Irrigation 11 times, 3 each time.	33	0 4 0	8 4 0	Hoeing	12	0 4 0	3 0 0	Irrigation (10 times), 4 men.	40	0 5 0	12 8 0
				Earthing up	4	0 4 0	1 0 0				
Hoeing and drawing earth over.	10	0 4 0	2 8 0	Making ridges ...	4	0 4 0	1 0 0	Hoeing	10	0 5 0	3 2 0
				Lifting	8	0 4 0	2 0 0	Levelling	4	0 5 0	1 4 0
Making drills ...	6	0 4 0	1 8 0					Making furrows ...	3	0 5 0	0 15 0
Earthing up	6	0 4 0	1 8 0					Lifting	8	0 5 0	2 8 0
Lifting	8	0 4 0	2 8 0								
For Bombay potatoes	...	.....	73 10 6	Bombay	...	.....	71 5 0	Country	.....	...	77 14 0
For Country	...	.....	58 10 6	Country	...	.....	45 5 0	Bombay	.....	...	73 14 0
Plough	8			Plough	10			Plough	12		
Men	74			Men	61			Men	78		

XXIV.—*Potato.—Cost of cultivation*—continued.

Village Adan.				Village Koomirmorah.				Village Monirampur.			
Process.	No.	Rate.	Cost.	Process.	No.	Rate.	Cost.	Process.	No.	Rate.	Cost
		Rs. A. P.	Rs. A. P.			Rs. A. P.	Rs. A. P.			Rs. A. P.	Rs. A. P.
Ploughs	8	0 8 0	4 0 0	Ploughs	8	0 5 6	2 12 0	Ploughs ...	12	0 6 6	4 8 0
Seed (Country) ...	2 md.	12 0 0	24 0 0	Seed (Country), about.	2 men	0 6 0	32 0 0	Seed (Country) ...	2 mds.	16 0 0	32 0 0
Seed (Bombay) ...	6 ,,	7 8 0	45 0 0					Seed (Bombay) ...	8 ,,	6 0 0	48 0 0
Cowdung	50 baskets.	.....	2 0 0	Seed (Bombay) ..	6 mds.	6 8 0	40 0 0	Oil refuse	8 ,,	1 4 0	10 0 0
Spreading	2	0 4 0	0 8 0	Oil refuse	4 men	1 6 0	5 8 0	Irrigation	4×4=16	0 4 6	4 8 0
Oil refuse	7 md.	1 5 3	9 5 3	Planting	10	0 2 6	2 3 0	Hoeing	4×10=40	0 4 6	11 4 0
Planting	8	0 4 0	2 0 0	Irrigation 12 times,	24	0 3 4	5 4 6	Irrigation	4	0 4 6	1 2 0
Irrigation (8 times, 3 each).	24	0 4 0	6 0 0	at Rs. 2 each time.				Hoeing	5	0 4 6	1 6 6
Hoe	8	0 4 0	2 0 0	Digging with sickle	12	0 3 6	2 10 0	Irrigating	4	0 4 6	1 2 0
Levelling	4	0 4 0	1 0 0	Hoeing ...	2	0 3 6	0 7 0	Making ridges and furrows.	8	0 4 6	2 4 0
Making ridges and furrows.	4	0 4 0	1 0 0	Earthing up ...	3	0 3 6	0 10 6	Irrigating 5 times ...	20	0 4 6	5 10 0
				Making ridges ...	3½	0 3 6	0 12 3	Lifting	8	0 4 6	2 4 0
Lifting	10	0 4 0	2 8 0	Lifting	4	0 3 6	0 14 0				
Country	.....	.....	54 5 3	Country	...	.....	52 4 9	Bombay	.....	.....	95 6 6
Bombay	... ..	.....	75 5 3	Bombay	...	.....	60 4 9	Country	.....	.....	73 6 6
Plough... ...	8			Plough ...	8			Plough	12		
Men	60			Men ...	58½			Men	103		

XXIV.—*Potato.—Cost of cultivation*—concluded.

[Village Gungadhurpur—Naib.				Ryots.			
Process.	No.	Rate.	Cost.	Process.	No.	Rate.	Cost.
		Rs. A. P.	Rs. A. P.			Rs. A. P.	Rs. A. P.
Ploughs	5	0 5 0	1 9 0	Ploughs	12	0 6 3	4 11 9
Seed (Bombay)	5 mds.	5 0 0	25 0 0	Seed (Bombay)	7 mds.	6 0 0	42 0 0
Seed (Country)	1¼ ,,	16 0 0	20 0 0	Seed (Country)	2¼ ,,	16 0 0	36 0 0
Oil refuse	5 ,,	1 4 0	6 4 0	Oil refuse	8 ,,	1 4 0	10 0 0
Planting (Bombay)	8	0 4 3	2 2 0	Planting (Bombay)	8	0 4 3	2 2 0
Ditto (Country)	9	0 4 3	2 6 3	Ditto (Country)	10	0 4 3	2 10 7
Irrigation twice	4	0 4 3	1 1 0	Irrigate 4 times	12	0 4 3	3 3 0
Hoeing	9	0 4 3	2 4 3	Hoe	36	0 4 3	9 9 0
Irrigation	4	0 4 3	1 1 0	Irrigate	4	0 4 3	1 1 0
Cutting waterways	1	0 4 3	0 4 3	Cutting waterways	4	0 4 3	1 1 0
Irrigation and making furrows ...	4	0 4 3	1 1 0	Irrigate and make furrows	8	0 4 3	2 2 0
Irrigate and flood the field	25	0 4 3	6 10 3	Ditto and flood the field	25	0 4 3	6 10 3
Lifting	5	0 4 3	1 5 0	Lift	8	0 4 3	2 2 0
Bombay	.....	.....	48 12 0	Bombay	.....	.....	94 9 3
Country	.....	.....	44 4 0	Country	.....	.....	89 1 9
Plough	5			Plough	12		
Men	60			Men	105		

XXV.—*Pan.—Cost of cultivation.*

Cultivation of pan.

VILLAGE.	Process.	Number.	Rate.	Cost.
	Making covered with enclosure.		Rs. A. P.	Rs. A. P.
Begumpur ...	Bankaree (split) bamboo	4 kahans ..	12 0 0	48 0 0
	Pakatee (jute) stems for fence and roof.	100 bundles ...	5 0 0 per 100.	20 0 0
	Labour of erecting	160 ...	0 5 0	50 0 0
	Total cost of erecting ...	.....	.....	118 0 0
	Starting garden			
	Cuttings for young plants ...	20,600 ..	1 0 0 per 1,000.	20 0 0
	Daily watering for three months, two men.	180 ..	0 5 0	56 4 0
	Dhoncha to support stem	about 16 kahans ...	1 0 0	16 0 0
	Total ...	.....	.....	92 4 0
	Ordinary expenses.			
	Throwing up earth twice a year, 15 at each time.	30 ..	5 4 0	10 0 0
	Castor and mustard oil refuse, five maunds twice.	10 ..	1 4 0	12 8 0
	Wages of two labourers all the year round.	24 months ..	10 0 0 monthly.	240 0 0
	Total ...		.....	262 8 0
	Making covered enclosure.			
Adan	Bakaree (split) bamboos	50 pons ...	12 0 0	37 8 0
	Jute stems (pakatees) for fencing ...	20 loads ...	0 4 0	5 0 0
	Bena grass for thatch	250 loads ...	10 4 0	25 10 0
	Labour of making	50 ..	5 4 0	16 10 6
	Total .	.... .	.....	84 12 6
	Starting garden.			
	Cutting for young plants	12,000 ..	0 8 0 for 600	10 0 0
	Planting	20 ...	0 5 3	6 10 6
	Irrigation, one daily for our cottahs for one month.	150 ...	0 5 4	50 0 0
	Split bamboo rods for plants ...	10 kahans ...	2 0 0	20 0 0
	Total ...	.....	.....	86 10 6
	Current charges.			
	Throwing up earth three times, five each time.	15 ...	0 5 4	5 0 0
	Oil refuse	8 months ...	1 6 0	11 0 0
	Labour of three men throughout the year.	36 months ..	Say 8 months	288 0 0
	Total ...			304 0 0

XXVI.—*Husking paddy, results of experiments.*

1	2	3	4				5		6		
KIND OF PADDY.	Weight of paddy in seers of 80 tolahs.	Rate per maund.	OUTTURN OF PADDY. WEIGHT OF RICE, &C., IN SEERS OF 80 TOLAHS. (a) Rice.	(b) Khood or broken rice.	(c) Fine refuse or koorah.	(d) Coarse husk or toosh.	Total of sub-columns (a) and (b).	Total of sub-columns (c) and (d).	Total of sub-columns (a, b, c, and d).	Rice per maund of paddy.	REMARKS.
	Mds. s. c.	Rs. a. p.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	
Lall Kolma	0 10 0	1 2 0	5 10½	1 2½	1 8½	1 13½	6 12½	3 6	10 2½	27 3	All paddy was husked dry. I have been unable to do more than get the work done and have the table prepared. Being pressed for time, I have not been able to make any analysis. Owing to pressure of other work also, I was unable personally to superintend experiments. They were made near my tent, and I was usually near. A mohurir and peon were on guard.
Ditto	0 10 0	1 2 0	4 7½	2 3	1 5	1 12½	6 10½	3 1½	9 12	26 9	
Dholfa	0 10 0	1 0 6	5 15½	0 9½	1 10	2 2½	6 9½	3 12½	10 5½	26 5	
Ditto	0 10 0	1 0 6	4 9½	1 12	1 8½	1 15	6 5½	3 7½	9 12½	25 5	
Nagra	0 10 0	1 1 0	4 5	1 15½	1 8	1 12½	6 4½	3 4½	9 9½	25 3	
Ditto	0 10 0	1 1 0	4 8	1 13½	1 12	1 10½	6 5½	3 6½	9 12½	25 7	
Bankooi	0 10 0	1 0 0	2 10½	3 12½	1 11½	1 9½	6 6½	3 5½	9 12½	25 11	
Ditto	0 10 0	1 0 0	2 7	3 8½	2 3	1 11	5 15½	3 14	9 13½	23 13	
Pantharash	0 10 0	1 1 0	2 5	4 0	1 13½	1 7½	6 5	3 4½	9 9½	25 4	
Ditto	0 10 0	1 1 0	2 3½	3 11½	2 3½	1 7	5 15½	3 10½	9 9½	23 13	
Kalanddee	0 10 0	1 1 0	3 0½	3 4½	1 14½	1 7	6 5½	3 5½	9 10½	25 6	
Ditto	0 10 0	1 1 0	3 3½	3 3½	2 0½	1 8	6 7½	3 8½	10 0	25 13	
Balumshal	0 10 0	1 4 0	3 13	2 11½	1 10½	1 12	6 7½	3 6½	9 14½	25 15	
Ditto	0 10 0	1 4 0	3 0½	3 7½	1 6	2 0	6 8½	3 6	9 14½	26 1	
Megee	0 10 0	1 1 0	3 5½	3 4½	1 8½	1 11½	6 9½	3 4	9 13½	26 6	
Ditto	0 10 0	1 1 0	3 0½	3 3½	2 0½	1 5½	6 4	3 6	9 10	25 0	

R. CARSTAIRS,

Covenanted Deputy Collector, on Special Duty.

P. M. D'M. & others—Reg. No. 14981J—20—27-3-83.